**Ahmed Ali Mohammed**

**Sr. Network Engineer**

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**Summary:**

* 8 years of experience in Routing, Switching and Firewall Security, including hands-on experience in providing network support, installation and analysis for a broad range of **LAN / WAN/MAN** communication systems.
* As a Network Engineer I was involved in the configuration & troubleshooting of routing protocols: **MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4**. Configured IP access filter policies
* Design, implementation and operational support of routing/switching protocols in complex environments including **Spanning Tree, 802.1q**, etc.
* Experience with **JUNOS** platform and worked with **IOS** upgrade of Juniper devices
* Created **VLAN** and **Inter-Vlan** routing with Multilayer Switching.
* Substantial lab testing & validation prior to implementation of **Nexus 9k, 7K, 5K & 2K** connecting to blade servers
* Configuration and troubleshooting on **Juniper EX4500** and **EX8200** switches
* Strong hands on experience on **PIX (506, 515, 525, 535), Palo Alto, ASA (5505/5510)Firewalls**. Implemented security policies using **ACL, Firewall,IPSEC, SSL, VPN, IPS/IDS**.
* Proficient in Cisco IOS for configuration & troubleshooting of routing protocols: **MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4, MPLS**
* Routing Protocols - (**RIPV2, OSPF, EIGRP & BGP), ACL's, NAT, VLAN, STP,VRRP, VTP, HSRP & GLBP**
* In-depth knowledge of deploying and troubleshooting **LAN, WAN, Frame-Relay, Ether-channel**
* Strong hands on experience in **layer-3** Routing and **layer-2** Switching. Dealt with Nexus models like **9k**,**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
* Worked on ACE load balancers. Experience with **F5 load balancers** - **LTM, GTM** series like **6400, 6800, 8800** for the corporate applications and their availability
* Configuring, Troubleshooting and Testing of networking system
* Expertise in network protocols, Firewalls and Communication Network design.
* Has Cisco technology experience/knowledge in design, implementation, administration and support
* Provided 24x7x365 availability and on-call support as required
* Excellent working knowledge of **TCP/IP** protocol suite and **OSI** layers
* Sound knowledge of Routing and Switching concepts and **MPLS** design.
* Experience with cisco application centric infrastructure (**ACI**)
* Good knowledge in network hardware and technologies including routers, switches, bridges, hubs, Ethernet, frame relay, wireless, etc.
* Hands on experience with iWAN deployment.
* Experience with Cisco flexpod.
* Have knowledge of **NNM** and **BMC**Bladelogic Server Automation tool
* Have good knowledge in intrusion detection and prevention systems (**IDPS**)
* Familiar with Cisco firewalls **PIX 515, ASA 5500,** series, knowledge of **Juniper**, **Palo Alto** and **Check Point Firewalls**.
* Have good knowledge with **Qos** and **Cos**.
* Working knowledge of the Payment Card Industry Data Security Standards (**PCI DSS**) and assessment processes.
* Experience with **riverbed** technology.
* Dealt with Cisco IP phones, ACD and VOIP devices and configured Voice VLAN’s for Prioritizing voice on the network and did the documentation accordingly with changes.
* working knowledge of Sarbanes Oxley Section(**SOX**) 404 internal controls and audit processes.
* Experience in configuring and troubleshooting various WAN technologies like **MPLS, T1, T3, DS3 and ISDN**
* Experience in **Python.**

**Education:**Bachelors in Electronics and Communication, JNTU, Hyderabad, India

**Certifications:**

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

**Technical Skills: -**

**CISCO & OTHER VENDOR EQUIPMENT** Nexus 9k, 7K, 5K, 2K & 1K, Cisco routers Cisco GSR 12416 (7200, 3800, 3600, 2800, 2600, 2500, 1800 series) Cisco Catalyst switches (6500, 4900, 3750, 3500, 2900 series), Meraki switches, Juniper Routers and Switches,HPE comware switches, PIX Firewall (506/515/525/535), ASA Firewall (5505/5510), Cisco ACE Load Balancers, Fortinet firewall

**ROUTING PROTOCOLS** RIP, IGRP, EIGRP, OSPF, IS-IS, BGP, HSRP, and VRRP& GLBP. Infrastructure services: DHCP, DNS, SMTP, FTP, TFTP, IGMP

**LAN TECHNOLOGIES** Ethernet, Fast Ethernet, Gigabit Ethernet, & 10 Gigabit Ethernet, Port- Channel, VLANS, VTP, STP, RSTP, 802.1Q

**WAN TECHNOLOGIES** Frame Relay, ISDN, ATM, MPLS, leased lines & exposure to PPP, DS1, DS3, OC3, T1 /T3 & SONET

Packet Switched WAN – ATM, FRAME RELAY, MPLS VPNs

**OS PRODUCTS/SERVICES** DNS, DHCP, UNIX, LINUX, MAC OS X, Microsoft SQL Server 2008, Windows Server 2003, 2008, 2012, Windows 7/NT/Vista/XP, 10, VMware, Active Directory, IIS.

**NETWORK SECURITY** NAT/PAT, Ingress & Egress Firewall Design, VPN Configuration,Internet Content Filtering, Load Balancing, IDS/IPS, NAC, Dynamic, Reflexive ACL, and authentication AAA (TACACS+ & RADIUS)

**SECURITY TECHNOLOGIES** Cisco FWSM/PIX/ASDM, Cisco ISE, AMP, SourceFire, open DNS Nokia Checkpoint NG, Juniper SRX, Palo Alto, ACE Module and F5 Load Balancers

**Professional experience:**

**Liberty Mutual, Dover, NH Sept 2014 - Present**

**Sr. Network Engineer/ Security**

**Responsibilities:**

* Hands on experience with the configuration and implementation of various **Cisco** Routers and **L2 Switches.**
* **Data center** experience with migrating **cisco** devices to **juniper** network.
* Experience in **datacenters** with Tier1/2 clustered & backup environments management & troubleshooting
* Hands on experience with development on **L2**&**L3** protocols (**STP,RSTP,LACP,LDP,OSPF, BGP**)
* Extensive experience in configuring and implementing **EIGRP, OSPF and BGP**.
* Design, Configure and Deploy a variety of security products such as **firewalls**, **Intrusion Detection**, VPN appliances, vulnerability assessment tools, event and log analysis, security change tracking and other network security systems and devices.
* Hands on experience with the configuration and implementing of various **Juniper& Arista** Routers and switches.
* WAN Pilot project to convert branch from dual T1 circuits to iWAN only broadband circuit.
* To Enable Internet WAN connectivity for the Lab in Hauppauge.
* Test and turn-up IWAN link and disable the 2 existing T1 circuits, running branch on IWAN only.
* After testing was completed site will be placed back on either dual TDM circuits or TDM with IWAN backup circuit.
* Experience with **Juniper M, MX** series products
* Hands on experience with **HPE Comware switches.**
* Supported core network consisting of **Cisco 7200 series** routers running multi area **OSPF**.
* Worked **on 2600, 3500, 7613** Cisco Routers and **4500 and 6500** series Cisco Switches.
* Configured and deployed **BIG-IP LTM 6900** for providing application redundancy and load balancing
* Configuration of **EIGRP** and **OSPF** as interior gateway protocol with route filtering and route redistribution.
* Responsible for service request tickets generated by the helpdesk such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support
* Supporting **EIGRP** and **BGP** for problems of **L2/L3** in internal teams & external customers.
* Providing daily network support for national wide area network consisting of **MPLS, VPN** and point to point site.
* Support customer troubleshooting of **load balances** to ensure proper functionality.
* Upgrading used **DHCP** to automatically assign reusable IP addresses to **DHCP** clients.
* Support customer with the configuration and maintenance of **PIX, Palo Alto**and **ASA firewall** systems
* Hands on experience with **Cisco API (**Application programming interface**)**
* Built site-to-site **IPsec VPNsover Frame-relay & MPLS** circuits on various models of Cisco routers to facilitate adding new business partners to new and existing infrastructures.
* Installation and administration of Checkpoint **R 75.40 Firewall**.
* Experience with cisco application centric infrastructure (**ACI**)
* Worked on documentation to create Visio diagrams using **MS Visio**.
* Worked with Project Engineering to ensure the **reliability** and **maintainability** of new and modified installations.
* Providing the Root-cause and Root-Cause Failure Analysis (**RCA, RCFA**)
* Worked on **F5 BIG-IP LTM 8900**, configured profiles, provided and ensured high availability.
* Worked on **F5 load balancers** deploying many load balancing techniques with multiple components for efficient performance.
* Experience on **Cisco ISE** for users accessing the network on an authorized, policy-compliant device.
* Using **NAC** managed and secured internal environment of the network
* Experience with **Network Admission Control (NAC)** in designing.
* Enforced security policies by blocking, isolating, and repairing noncompliant machines using **NAC**
* Established user identity, location, and access history, which can be used for compliance and reporting using **Cisco ISE**
* Installation, Maintenance, Troubleshooting Local and Wide Areas Network (**ISDN, Frame relay, NAT, DHCP, TCP/IP).**
* Experience working with SDN and NFV concepts.
* Configuration of Access List **ACL** (Std., Ext, Named) to allow users all over the company to access different applications and blocking others.
* Configured **STP** for loop prevention and **VTP** for Inter-**VLAN** Routing.
* Hands on experience with Nexus Switches **2K, 5K, 7K and 9k**.
* Experience with **juniper** routers with routing protocols as **OSPF, BGP, LDP.**
* Knowledge of and worked with **Wireless controllers** and access points **(WAP**).
* Design, implementation and support personnel to configure and operate the **Juniper Networks** products
* Responsible for maintaining current documentation of **LINUX** systems, server configurations, administrative tools, and procedures for implementation/adaptation of products and services.
* Responsible for Managing **VMware** client.
* Experience with **Cisco Prime Infrastructure**.
* Experience with **Cisco ASA and Checkpoint Firewalls**
* Experience with Fortinet Firewalls
* Practical experience with **MPLS, BGP, OSPF, IGMP V1 & V2** protocols
* Support ongoing efforts in defining best practice policies for **Juniper** product applications used by Customer
* Created standard access lists to allow **SNMP, NTP** and logging servers.
* Documented new **VPN** enrollments in a database and create standard procedures for further improvement.
* Experience with application performance management tools (**Solarwinds, Netscout**) to troubleshoot, analyze bandwidth and user traffic issues.
* Experience with **Datacenter** environment.
* Experience in design and build of **Greenfield** setup of network in a **Data center**.
* Experience running and troubleshooting of the **network cabling.**
* Experience with shipping and receiving of **Data Center** equipment
* Troubleshoot traffic passing managed firewalls via logs and packet captures.
* Configured multiple domain name services (**DNS)**, email services (**Exchange Server**), web, and file transfer protocol services (**FTP)** for various platforms including line leasing through **DHCP** servers.
* Configuring various advanced features (Profiles, monitors, iRules, Redundancy, SSL Termination, Persistence, **SNATs, HA on F5 BIGIP** appliances **SSL** termination and initiation, Persistence, Digital Certificates, Executed various migration/upgrade projects across F5 and hands on with **F5 BIGIP LTMs/EM** and **WOM**
* Proficient in **VoIP** infrastructure and protocols- **SIP, MGCP, SCCP and SRTP**. Cisco Unified Communication Manager(**CUCM**)
* Experience in **Cisco Unified Call Manager** Express and High Availability solutions.
* Provided training and support of InformaCast (Singlewire) to implement the upgrade InformaCast server software from 9.0.2 to the latest available version that is supported on the Cisco Unified Call Manager (CUCM) version.
* Hands on experience with **Flexpod.**
* Manages and develops upgrades to the company's **telephone** system.
* Oversees all **telephone** changes, including routing for seating assignments.
* Hands on experience with **Cisco iWAN** technologies, specifically Wan Optimization & DMVPN
* Hands-on knowledge of the installation, implementation, and maintenance of **NetApp** platforms
* Experience with Cisco meraki**MX80** switches
* Juniper experience on routing products (**MX5 through MX960**) and security products (**SRX**)
* Networking protocols worked with included but not limited to **TCP/IP, DNS, WINS, DHCP, VPN,** Terminal Services, Routing and Remote Access, Network Design, wiring and cabling.
* Key contributor in the execution of all regulatory and compliance (**SOX, PCI, etc**.) readiness assessments and information sessions.
* Hands on experience with deployment & support in **Unified Communication Domain**.
* Experience with **SIP**Trunking for **PSTN** access, call flows and troubleshooting.
* Experience with SQL
* Experience with **Shell scripting, Perl**&**Python**, with knowledge of Python web framework **Django.**

**OnDeck, NYC, NY Jan 2013 – Sept 2014**

**Network Engineer**

**Responsibilities:**

* Network Architect for datacenter consolidation project. Consolidated 16 global datacenters consisting of **Cisco 6500, 4500, 2800, ASA 5540, F5 BIG-IP 3600**. Consolidation was in preparation to upgrade datacenters to **Nexus 9000, 7000, 5000, 2000, and ASR 1000** backbone infrastructure.
* Provided Cloud Network Infrastructure support for global clients. Included setting up new **VPNs**, **NAT**, and **URL** configuration
* Implemented **802.1X** port authentication solution using Cisco ISE and Microsoft Active Directory
* Primary responsibility is to design and deploy various network security & High Availability products like Cisco ASA other security products
* Install, Manage & Troubleshoot Large Networks & Systems Administration on Windows & Linux platforms in Development, Lab & Production Environments
* Monitored network performance, availability, and reliability using tools such as **Wireshark, Net flow, Solar winds.**
* Worked extensively in Configuring, Monitoring and Troubleshooting **Cisco's ASA 5500/PIX** security appliance, Failover DMZ zoning & configuring VLANs/routing/NATing with the firewalls per design
* Worked **on F5 Load Balancers** – Configuring rules, Profiles, **Nats/Snats**, Load Balancing
* Responsible for Cisco ASA, Palo Alto firewall administration across our global networks
* Set up site-to-site and remote access **VPN**, and created security policies on firewalls
* Implement and configured **GLBP** (on core switching and also for VPN redundancy), **HSRP** on different location of office on the switched network and managing the entire multilayer switched network
* Hands-on implementation and configuration of **routers, hubs, switches, Wireless Controllers**, **Wireless Access points**, and cabling in a large enterprise **LAN / WAN / WLAN** environment
* Good knowledge and experience with **Wi-Fi** technologies.
* Troubleshooting and installing of **CRS, ISR, GSR, ASR9000** and Nexus devices.
* Engineering the configurations for the different branches, campus locations
* Worked on the redistribution of connected routes on all OSPF devices so that all connected subnets are advertised via **OSPF**
* Configuration and extension of **VLAN** from one network segment to other segment between Different vendor switches (Cisco, Juniper)
* Dealt with creating **VIP**(virtual servers), pools, nodes and applying iRules for the virtual servers like cookie persistency, redirection of the URL
* Hands-on configuration and operational knowledge of**Juniper Networks** routers and switches
* Design, and configuring of **OSPF, BGP on Juniper Routers and SRX Firewalls**
* Configuring **IPSEC VPN** on **SRX** series firewalls
* Configuration and troubleshooting on **HSRP, VRRP, GLBP, RSTP, MST** related issues coming in network environment.
* Experience with layer 3 routing and WAN related technology, including EIGRP, BGP, IWAN, PfR, VRFs, MPLS, DMVPN, WAAS, and QoS.
* Experience with **Fortinet** and **Checkpoint** Firewalls
* Expert knowledge of routing protocols including **BGP, OSPF, IGMP**
* Experience with multi-domain security management (provider 1)
* Configuration and extension of VLAN from one network segment to their segment between Different vendor switches (Cisco, Juniper)
* Using **UCS C** series server, simplified and fast deployment of applications
* Conversions to **BGP WAN routing**. Which will be to convert WAN routing from **OSPF to BGP** (OSPF is used for local routing only) which involves new wan links.
* Migration of existing **IPSEC VPN** tunnels from Pre-Shared key to Certificate Authority for purpose of scaling
* Provided input to Risk Management Plan to anticipate reliability-related, and non-reliability-related risks to impact plant operation.
* Experience using **Splunk** monitoring tool
* Experience using **Qos**
* Expert knowledge with Windows OS 7 & 10
* Experience with **Shell scripting& Perl.**
* Experience with event-driven programming in **Python**
* Experience with Automated Call Distribution (ACD), dealing with inbound and outbound calls
* Responsible for Cisco ASA firewall administration across our global network

**QVC Studio, West Chester, PA Oct 2011 – Dec 2012**

**Network Engineer**

**Responsibilities:**

* Configured **IP RIP, PPP, BGP, IS-IS and OSPF** routing protocols
* Involved in the configuration & troubleshooting of routing protocols: **MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4.** Configured IP access filter policies.
* Experience with Checkpoint Firewall policy provisioning
* Identifying technical problems and debugged hardware and software related to **LANs/ WANs**, different kind of workstation (**PC/ MAC/ LINUX**), laptops, printers, and copier.
* Identify, design and implement flexible, responsive, and secure technology services
* Experience with Cisco ASA and Checkpoint Firewall Administration, Rule Analysis, Rule Modification
* Configured and implemented **Nexus 5K and 2K** in lab environment
* Experience with configuring **Nexus 2000 Fabric Extender (FEX)** which acts as a remote line card (module) for the **Nexus 7000**.
* Test Equipment Network Instruments **OPNET, Ethereal/Wireshark**.
* Troubleshoot traffic passing managed firewalls via logs and packet captures
* Configured and resolved various OSPF issues in an OSPF multi area environment.
* Managed fast Layer 3 switched/routed LAN/WAN infrastructure as a part of Network team. The LAN consisted of Cisco campus model of **Cisco 3550** at access layer, **Cisco 6513** at distribution/core
* Check for DNS issues by pinging the server’s name. Experience with Wireshark, Test **TCP& OPNET**
* Understanding the JUNOS platform and worked with IOS upgrade of Juniper devices
* Configuration and troubleshooting on Juniper **EX4500 and EX8200** switches
* Implementing VoIP solutions using **SIP & H.323**, also have sound knowledge of **Avaya VoIP** products
* Managed inbound calls with **ACD**
* Convert Branch WAN links from **TDM and SIP** circuits to **MPLS** and to convert encryption from **IPSec/GRE to Get VPN**.
* Configuring and troubleshooting **CISCO catalyst 6509, 7609, 7613** with Supervisor cards, Cisco **3640, Cisco GSR 12416,21418**(with PRP and RPR processors)
* Configuring **RIP, OSPF and Static routing** on Juniper Routers
* Designed and implemented Cisco VoIP infrastructure for a large enterprise and multi-unit office environment. Met aggressive schedule to ensure a Multi-office reconfiguration project which was successfully delivered
* Experience with AMP to strengthen defenses and protect against known and emerging threats
* Experience using AMP Continuously track activity and communication on devices and on the system level to quickly understand root causes and the history of events leading up to and after a compromise
* Experience with implementing Application centric infra-structure **ACI**
* Maintained an advanced level of knowledge in the technical areas relevant to **SOX, PCI DSS** and other regulatory requirements.
* In-depth knowledge of open internet standards and protocols such as: **Ethernet, Wi-Fi.**
* Configuration and troubleshooting of **Cisco catalyst 6509,7613** with supervisor cards
* Design, implementation and operational support of routing/switching protocols in complex environments including **BGP, OSPF, EIGRP, Spanning Tree, 802.1q,** etc.
* Estimated Project costs and created documentation for project funding approvals.
* Managed various teams involved in site surveys, cabling specifications, Network equipment installation and configuration.
* Implemented redundant Load balancing technique with Internet applications for switches and routers.
* Experience with implementation and management of **Cisco Call Manager servers**
* Experience with **Windows Server 2012**
* Planned resources and presented project status to higher management.
* Excellent troubleshooting knowledge on **T1, T3, OC-3 and OC-12.**

**Apollo Health, India** Aug 2010 – Sep 2011

**Network Engineer**

**Responsibilities:**

* Migration of **RIP V2 to OSPF, BGP routing protocols.**
* Configured **EIGRP** for Lab Environment.
* Implemented **ISL** and **802.1Q** for communicating through **VTP.**
* Working with Client teams to find out requirements for their Network Requirements.
* Designing0 solutions for frozen requirements using Cisco Routers and Switches.
* Deploying the network infrastructure to meet the requirements
* Experience working with **F5 Load Balancer LTM and GTM module**
* Experience configuring Virtual Device Context in **Nexus 7010.**
* Experience with Juniper JUNOS operating system and working on **M and MX series routers**
* Created VLAN and Inter-V
* lan routing with Multilayer Switching.
* Substantial lab testing & validation prior to implementation of **Nexus 7K, 5K & 2K** connecting to blade servers
* Understanding the JUNOS platform and worked with IOS upgrade of Juniper devices
* Completed service requests (i.e. – IP readdressing, bandwidth upgrades, IOS/platform upgrades, and etc)
* Providing technical consultancy for better application response using **QoS**
* Monitor performance of network and servers to identify potential problems using **Sourcefire**
* Performed **RIP, OSPF, BGP EIGRP** routing protocol administration.
* Installed wireless access points (WAP) at various locations in the company.
* Maintained redundancy on **Cisco 2600, 2800 and 3600**routers with **HSRP**.
* Real time monitoring and network management using Cisco Works LMS.
* Provided technical support on hardware and software related issues to remote production sites.
* Other responsibilities included documentation and support other teams

**Blooms Software solutions, India**May 2008 – July 2010

**Network Engineer**

**Responsibilities:**

* Managed network connectivity and network security, between Head offices and Branch office
* Responsible for Internal and external accounts and, managing **LAN/WAN** and checking for Security Settings of the networking devices (Cisco Router, switches) co-coordinating with the system/Network administrator during any major changes and implementation
* Responsible for the installation, configuration, maintenance and troubleshooting of the company network. Duties included monitoring network performance using various network tools to ensure the availability, integrity and confidentiality of application and equipment
* Installation & configuration of **Cisco VPN** concentrator **3060** for VPN tunnel with Cisco VPN hardware & software client and **PIX firewall**
* Configured application load balancing using **F5 LTM**.
* Configuration and troubleshooting on Juniper **EX4500 and EX8200** switches
* Dealt with Cisco IP phones and VOIP devices and configured Voice VLAN’s for Prioritizing voice on the network and did the documentation accordingly with changes.
* Configured, Managed and troubleshooting **802.1X** authentication for windows server-client based environment.
* Configured Firewall logging, **DMZs**& related security policies & monitoring
* Creating Private VLANs & preventing VLAN hopping attacks & mitigating spoofing with snooping & IP source guard
* Involved in troubleshooting of **DNS, DHCP** and other IP conflict problems
* Implementation of name resolution using **WINS & DNS in TCP/IP** environment
* Configured **FTP** server for inside/outside users & vendors
* Implemented the security architecture for highly complex transport and application architectures addressing well known vulnerabilities and using access control lists that would serve as their primary security on their core & failover firewalls