

# Abhishek Mandala

## Sr. Network Engineer - NOKIA

Decatur, GA - Email me on Indeed: [indeed.com/r/Abhishek-Mandala/1bc4dbed8aadccde](https://indeed.com/r/Abhishek-Mandala/1bc4dbed8aadccde)

- Having 7+ years of professional experience in Network Designing, Deployment, Configuring, Troubleshooting and Testing of networking system
- Design and configuring of OSPF, BGP on Juniper Routers (MX960) and SRX Firewalls(SRX240)
- Experience working with High performance data center switch like nexus 7000 series
- Experience working with Nexus [...] 5020, 2148, 2248 devices
- Dealt with the escalation problems for Routing, Switching and WAN connectivity issues using ticketing system like Remedy Ticketing System
- Working with Cisco for opening TAC Case and resolving issues to meet project deadlines.
- Experience with designing, deploying and troubleshooting LAN, WAN, Frame-Relay, Ether-channel, IP Routing Protocols - (RIPV2, OSPF, EIGRP & BGP), ACL's, NAT, VLAN, STP, VTP, HSRP & GLBP
- 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
- Strong hands on experience on PIX Firewalls, ASA [...] Firewalls, Palo Alto Firewalls. Implemented Security Policies using ACL, Firewall, IPSEC, SSL, VPN, IPS/IDS, AAA (TACACS+ & RADIUS)
- Having Experience in Implementation, Administration and Maintenance in multi-vendor platform environments (Cisco, Juniper, Checkpoint, F5, Palo Alto)
- Efficient at use of Microsoft VISIO/Office as technical documentation and presentation tools
- Working knowledge with monitoring tools like Solar Winds & network packet capture tools like Wire-shark
- Strong knowledge on working with F5 Load balancers and their implementation Data Center Networks
- Experience with network based F5 load balancers with software module GTM & checkpoint
- Experience with using F5 Load balancer in providing worldwide data and file sharing, continuous internet connectivity and optimized web performance
- Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability
- Experience with using LTM F5 component to provide 24X7 access to applications
- Provided [...] availability and on-call support as required by the projects
- Excellent working knowledge of TCP/IP protocol suite and OSI layers
- Good knowledge and experience in Installation, Configuration and Administration of Windows Servers [...] Active Directory, FTP, DNS, DHCP, TFTP, Linux OS under various LAN and WAN environments
- Experience in analyzing network using monitoring tools like Solar winds and Wire shark.
- Prepared Technical Documentation and presentations using Microsoft VISIO/Office.

### WORK EXPERIENCE

#### Sr. Network Engineer

NOKIA - Atlanta, GA - March 2015 to Present

##### Responsibilities:

- Experience with Network Redesign for Company Campus Locations and Moving from 6500 based Data Center to Nexus based Data Center.
- Experience with design and configuring Overlay Transport Virtualization (OTV) on Cisco NX-OS devices like Nexus 7000
- 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
- Experience with design and configure Fibre Channel over Ethernet (FCoE) on Cisco Nexus 5548 devices.
- Configured and installed various network devices and services. Performed network maintenance and system upgrades during maintenance hour including service packs, patches, hot fixes and security configuration.
- Experience working with migration from 6500 series devices to 4500 Series switches in Campus deployments at Core, Distribution and Access Layers.
- Experience with LAN protocols like STP, RSTP, MST, VTP, VLAN and Port Channel Protocols like LACP, PAGP
- Implementing and managing traffic engineering, Qos, Cos on top of an existing Multiprotocol Label Switching (MPLS) network using Frame Relay and Open Shortest Path First (OSPF).
- Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASA 5500 with ACL, NAT, Object Groups, Failover, Multi-Contexts
- Experience with migrating from Cisco ASA 8.2 version to Cisco ASA 8.4 Version
- Experience with convert PIX rules over to the Cisco ASA solution.
- Responsible for Cisco ASA firewall administration across our global networks
- Migration of existing IPSEC VPN tunnels from one Data Center to another Data Center, due to decom of existing Data Center, which involved working with Partner Companies.
- Experience with converting WAN routing from EIGRP/OSPF to BGP (OSPF is used for local routing only) which also involved converting from Point to point circuits to MPLS circuits.
- Enabled STP attack mitigation (BPDU Guard, Root Guard), using MD5 authentication for VTP, disabling all unused ports and putting them in unused VLAN
- Implement and configured VRRP/GLBP (on distro/core switching), HSRP on different location of office on the switched network and managing the entire multilayer switched network
- Experience working with Cisco Nexus 2148 Fabric Extender and Nexus 5000 series to provide a Flexible Access Solution for a datacenter access architecture
- Experience configuring VPC, VDC and ISSU software upgrade in Nexus 7010
- Experience in Configuring, upgrading and verifying NX-OS operation system with OSPF, BGP
- Key contributions include troubleshooting of complex LAN/WAN infrastructure that include routing protocols EIGRP, OSPF & BGP
- Implemented Site-to-Site VPNs over the internet utilizing 3DES, AES/AES-256 with ASA Firewalls
- Migrated, created, and managed pools and clusters in F5 BigIP GTM 3DNS load balancers across multiple Datacenters.
- Experience on working with the trouble tickets on F5 Load Balancers
- Installation & configuration of Microsoft Proxy Server 2.0& Blue Coat Proxy
- Configured, installed, &managed DHCP, DNS, & WINS servers
- Provide front end on-call network support 24x7x365 for all network infrastructures in the co-operation

## **Network Security Engineer**

Verizon Wireless - Township of Warren, NJ - September 2014 to February 2015

### **Responsibilities**

- Involved in design and implementation of Data Center Migration, worked on implementation strategies for the expansion of the MPLS VPN networks
- Experience converting Cat OS to Cisco IOS on the Cisco 6500 switches
- Designed MPLS VPN and QoS for the architecture using Cisco multi-layer switches
- Cisco IOS experience on 3600/7200 class hardware in complex WAN environment and experience on Cisco OS and IOS on CAT6500 in a complex data centre environment
- Configuring IP, RIP, EIGRP, OSPF and BGP in routers.
- Experience in deploying EIGRP/BGP redistribution and the changing the metrics for the primary and backup

- Experience on a mesh 6500 and 5500 series routes and switches to support the core trading system. Involved
- In designing data communications and networks utilizing that utilize a mixture of frame relay, point to point
- Experience in migration of Frame-relay based branches to MPLS based technology using multi-layer stackable switch like 6500 series and 2800 series router
- 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.
- Implementing traffic engineering on top of an existing Multiprotocol Label Switching (MPLS) network using Frame Relay and Open Shortest Path First (OSPF).
- Configuring RIP, OSPF and Static routing on Juniper M and MX series Routers
- Configuring VLAN, Spanning tree, VSTP, SNMP on EX series switches
- Design and configuring of OSPF, BGP on Juniper Routers and SRX Firewalls.
- Involved in iRule management like loading rules, writing iRule syntax using TCL language
- Hands on Experience testing iRules using Browser(IE), HTTP watch
- Responsible to manage, configure and implement Checkpoint, Cisco ASA and Palo Alto firewall
- Provided redundancy in a multi homed Border Gateway Protocol (BGP) network by tunings AS-path.
- Worked on Juniper J series j230, M 320 routers and EX 3200 series switch.
- Created engineering configuration, Security Standards, documenting processes and Network documentation using Microsoft Visio
- Created and edited the Knowledge base articles related to Palo Alto Networks.
- Involved in diagnosing and troubleshooting the issues related to Palo Alto Network firewalls
- Upgrade Cisco Routers, Switches and Firewall (PIX) IOS using TFTP
- Implemented the concept of Route Redistribution between different routing protocols
- Switching related tasks included implementing VLANs, VTP, STP and configuring on Fast Ethernet
- Involved in SNMP Network management. Worked on various scanning and Sniffing tools like Ethereal
- Upgrades and backups of Cisco router configuration files to a TFTP server
- Implementing and maintaining backup schedules as per the company policy
- Experience working with Nexus 7010, 7018, 5020, 2148, 2248 devices
- Experience working with High performance data center switch like nexus 7000 series
- Manage Cisco Routers and troubleshoot layer1, layer2 and layer3 technologies for customer escalations
- Taking Regular backups & testing the backups by restoring in test lab frequently
- Managing a TACACS server for VPN user authentication and network devices authentication
- VLAN Configurations, troubleshooting and Firewall ACLs and Object-Groups configuration and support
- Configured IPsec site-to-site VPN connection between Cisco VPN 3000 Concentrator and Cisco 3800
- Upgrades load balancers from Radware to F5 BigIP v9 which improved the functionality and scalability in the enterprise.
- Managed the F5 BigIP GTM/LTM appliances to include writing iRules, SSL offload and everyday tasks of creating WIP and VIPs.

## **Network Engineer**

Beam - Hyderabad, ANDHRA PRADESH, IN - November 2012 to August 2014

### **Responsibilities:**

- Installation and Configuration of Cisco Catalyst switches 6500, 3750 & 3550 series and configured routing protocol OSPF, EIGRP, BGP with Access Control lists implemented as per Network Design Document and followed the change process as per IT policy It also includes the configuration of port channel between core switches and server distribution switches
- Experience with Synchronous Optical Networking (SONET) over optical fiber.
- Involved in Configuring and implementing of Composite Network models consists of Cisco 7600, 7200, 3800 series and ASR 9k, GSR 12K routers and Cisco 2950, 3500, 5000, 6500 Series switches.
- Responsible for day to day management of Cisco Devices, Traffic management and monitoring.

- Experience in HSRP standby troubleshooting & Experience in configuring & upgrading of Cisco IOS
- Installation, Configuration and troubleshooting Cisco switches and Firewall on multi-mode context based environments
- 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.
- Router/ Microsoft VPN Server in order to access certain limited network resources from customer locations
- Responsible for turning up BGP peering and customer sessions, as well as debugging BGP routing problems.
- Designing and Implementation of (LAN) VLANs, VTP, Spanning Tree (STP), Trunking (dot1q and ISL) and Ether channel.
- Installed and configured four PIX525 and two ASA 5505 in customer locations. In addition to that, two PIX firewall configured for the Guest access
- Involved in the redistribution into OSPF on the core ASA firewall.
- Involved in the removal of 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.
- Involved in designing L2VPN services and VPN-IPSEC authentication & encryption system.
- Tuned BGP internal and external peers with manipulation of attributes such as metric, origin and local Preference.
- Cisco Secure Access Control Server (ACS) for Windows to authenticate users that connects to a VPN 3000 Concentrator.
- Scripting experience with Perl.
- Configuring, Installing and troubleshooting on Check Point Devices.
- Deploying and configuring F5 3DNS and Big-IP-LTM for global and local traffic management.
- Good knowledge on Intrusion Detection and Intrusion Prevention System.
- Knowledge on multiplex techniques such as DWDM.
- Troubleshoot and Worked with Security issues related to Cisco ASA/PIX , Checkpoint, IDS/IPS and Juniper Netscreen firewalls.
- Implemented Hot Standby Router Protocol (HSRP) by tuning parameters like preemption.
- Worked on FTP, HTTP, DNS, DHCP servers in windows server-client environment with resource allocation to desired Virtual LANs of network.

## **Network Admin**

Kotak Bank - Hyderabad, ANDHRA PRADESH, IN - May 2010 to October 2012

### **Responsibilities**

- Installed and configured Cisco ASA 5500 series firewall and configured remote access IPSEC VPN on Cisco ASA 5500 series
- 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
- Used various scanning and sniffing tools like Wire-shark
- Enabled STP Enhancements to speed up the network convergence that include Port-fast, Uplink-fast and Backbone-fast
- Configured network access servers and routers for AAA Security (RADIUS/ TACACS+)
- Other responsibilities included documentation and change control
- Worked on Cisco routers 7200, 3800, 2800 and Cisco switches 4900, 2900
- Key contributions include troubleshooting of complex LAN/WAN infrastructure that include
- Configured Firewall logging, DMZs & related security policies & monitoring
- Creating Private VLANs & preventing VLAN hopping attacks & mitigating spoofing with snooping & IP source guard

- Hands on Experience working with security issue like applying ACL's, configuring NAT and VPN
- Documenting and Log analyzing the Cisco ASA 5500 series firewall
- 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
- Routing protocols OSPF, RIP & BGP
- Configured BGP for CE to PE route advertisement inside the lab environment
- Spearheaded meetings & discussions with team members regarding network optimization and regarding BGP issues
- Responsible for Configuring SITE\_TO\_SITE VPN on Cisco Routers between Head Quarters and Branch locations
- Provided Load Balancing towards access layer from core layer using F5 Network Load Balancers.
- Configured with F5 Load balancers in Failover for Load balancing
- 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
- Installation & configuration of Cisco VPN concentrator 3060 for VPN tunnel with Cisco VPN hardware & software client and PIX firewall

## SKILLS

BGP (7 years), CISCO (7 years), FIREWALL (7 years), OSPF (7 years), SECURITY (7 years)

## ADDITIONAL INFORMATION

### SKILLS

- Cisco & other vendor equipment's Nexus 7K, 5K, 2K & 1K, Cisco routers (7200, 3800, 3600, 2800, 2600, 2500, 1800 series) & Cisco Catalyst switches (6500, 4900, 3750, 3500, 4500, 2900 series). PIX Firewall [...] ASA Firewall [...] Palo Alto [...] ACE Load Balancers
- Routing Protocols RIP, IGRP, EIGRP, OSPF, IS-IS, BGP, HSRP, VRRP & GLBP
- Infrastructure services DHCP, DNS, SMTP, FTP, TFTP
- 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, F5 Load balancer
- Network Security NAT/PAT, Ingress & Egress Firewall Design, VPN Configuration,
- Dynamic, Reflexive ACL, and authentication AAA(TACACS+ & RADIUS)
- Network Management SNMP, Cisco Works, Wireshark
- Platform Cisco IOS-XR, Cisco Cat OS, Cisco IOS(11.x, 12.x), PIX IOS(6.x, 7.x), CAT-OS UNIX, LINUX,
- Windows XP, NT, 2000, 2003
- Documentation MS Office, MS Visio