# **Parth Patel**

## Network Security Engineer - State of Ohio, Job & Family Services

Columbus, OH - Email me on Indeed: indeed.com/r/Parth-Patel/fd8e3a4ff4a08888

- Network engineer with around 6+ years of experience in routing, switching, firewall technologies, system design, implementation and troubleshooting of complex network systems.
- Worked on Cisco Nexus 9000, 7000 ,5000 ,2000, Catalyst 3850, 4500, 6509, 7613 series switch, 6500, 7200VXR, ASR 1002, 1006 router.
- Hands-on configuration and experience in setting up Cisco routers to perform functions at the Access, Distribution, and Core layers.
- Hands on Experience with Back up, upgrade and restring all OS for future disaster recovery purposes.
- Expertise in configuring of MPLS, IP Multicast, VPN, Frame Relay and Policy routing.
- Widespread work proficiency in advanced TCP/IP Management, IP Addressing &Subnetting VLSM, Route Summarization, Route Redistribution and NAT/PAT.
- Experienced with route manipulation by using Offset-list and route filtration by using Access-lists, Distribution list and Route Maps.
- Good understanding and hands on experience configuring AAA-authentication, authorization, accounting, SSH, Syslog, SNMP and NTP.
- Experience in configuration Voice over IP (VOIP).
- Expertise in configuring of MPLS, IP Multicast, VPN and Policy Based routing.
- Extensive experience in configuring and troubleshooting of BGP (EBGP, IBGP), EIGRP, OSPF and MPLS (LDP) protocols.
- Hands on in deployment of GRE tunneling, SSL, Site-Site IPSEC VPN and DMVPN.
- 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.
- Involved in troubleshooting network traffic and its diagnosis using tools like ping, traceroute, Wireshark and Linux operating system servers.
- Proficient in Configuring Virtual Local Area Networks (VLANS) using Cisco routers and multi-layer Switches and supporting STP, RSTP, PVST, RPVST along with trouble shooting of inter-VLAN routing and VLAN Trunking using 802.1Q.
- Experience with Project documentation tools & implementing and maintaining network monitoring systems and experience with developing network design documentation using VISIO.
- Excellent Verbal, written communication skills and Interpersonal skills with ability to work with large teams as well as independently with minimum supervision & Team Player.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

## WORK EXPERIENCE

## **Network Security Engineer**

State of Ohio, Job & Family Services - Columbus, OH - April 2017 to Present

- As part of Network Operation team, I am responsible of Troubleshooting Palo alto 5050, ASA Firewall -5500 series, Cisco Router and Switch.
- Work with County Engineer and other support specialists to resolve network outages.
- Responsible for implementing firewall technologies including general configuration, optimization, security policy, rules creation and modification of ASA and Palo Alto Firewalls.
- Working on Traffic Migration from Cisco ASA firewalls to Palo Alto firewalls platforms PA 5050

- Extensive Packet level debugging and troubleshooting on Palo Alto Firewalls to resolve numerous network issues.
- Experience with DNS/ DHCP Standardizations and Implementations.
- Configuration, Troubleshooting and Maintenance of ASA Firewalls (40+ firewalls) 5505, 5510, 5520, 5540, 5585
- · Configuring rules and Maintaining ASA Firewalls & Analysis of firewall logs using various tools
- Configured Security policies including NAT, PAT, VPN's and Access Control Lists.
- Extensive Network troubleshooting and problem solving experience working with over 89+ Government County Agencies of various shapes and sizes
- Experience Monitoring Tools Spectrum, Statseeker.

Tesoro - San Antonio, TX - October 2016 to March 2017

- AS part of network migration team, we started to build a two-new cloud enable datacenter. Major responsibility is to standup core network, migrate all current services from production and shutdown current datacenters.
- Responsibilities include software upgrade, license activation, configuring/installing new ASR router 1002, 1006, Nexus switch 9504, 9372, 3172, 2348, ASA 5585 SSP-40, 5585 SSP-20, 5585 SSP-10, F5-5050 and maintaining network documentation.
- Experience to troubleshoot and standup various service provider WAN Circuits.
- Experience with design and implementation of Data center migration
- Responsible for enterprise routing, switching, VLANs, Spanning Tree, Trunking, EIGRP and BGP. Responsible for route path control via distribution list, ACL's, redistribution, and route-maps with BGP, and EBGP.
- Configure various BGP attributes such as Local Preference, AS prepend, Next-hop, Community, Extended community using route-map
- Configured and migrated DMVPN Tunnels from current environment.
- Provide connectivity of various network appliances like Voice router, voice gateway, ISE, Answerless controller, Riverbed steel head (WAN optimizer), Infoblox
- Experience to provide Network core device connectivity to Big switch, Garland Taps, and Big switch monitor for Network traffic monitoring.
- Configured Site Redundancy using EIGRP, IP SLA, and HSRP.
- Deployed network tools such as Cisco firepower, Fire eye, Cisco Fire Sight manager, Source Fire, Cisco Prime.
- Knowledge of Fiber, Ethernet Infrastructures using Fluke Network Testers
- Setup network monitoring and alerts for our network and server devices using SNMP, configure authentication using TACAS+ authentication and NTP setup.
- Experience working with design and deployment of MPLS Layer 3 VPNV4(MP-BGP) cloud, Involving VRF, Route Distinguisher(RD), Route Target(RT), Label Distribution Protocol (LDP), Super backbone, SHAM Link, MPLS PE-CE connection troubleshooting.
- Actively involved in Switching Technology Administration including creating and managing VLANS, Port security- 802.1x, Trunking 802.1Q, Inter-VLAN routing, ether channels and LAN security on Cisco Catalyst Switches 3800,3900,4507R+E, 6509-E
- Switching related tasks included configuring VTP, Inter-VLAN Routing, EtherChannel (LACP & PAgP) and RPVST+ for loop avoidance.
- Extensive knowledge working with Service Now ticketing system for incident and change management

### **Network Engineer**

EBay - San Jose, CA - May 2015 to September 2016

- As a part of LAN, WAN and WLAN architecture team, I was responsible for designing, managing, troubleshooting and configuring Layer 2 and Layer 3 network equipment such Cisco routers 7200, 3800, 3700, 2900 and Cisco Catalyst switch series 6500, 4500, 3500XL
- Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, configuration, upgrades, patches and fixes with all around technical support in complete LAN development
- Good knowledge in configuring and troubleshooting Exterior Gateway protocols such as BGPv4 including internal BGP (IBGP) and external BGP (EBGP).
- Worked on Route-Reflectors to troubleshoot BGP issues related to customer route prefixes also route filtering using Route-maps.
- Configured EBGP for CE to PE route advertisement inside the office environment
- Experience working with design and deployment of MPLS Layer 3 VPNV4(MP-BGP) cloud, Involving VRF, Route Distinguisher(RD), Route Target(RT), Label Distribution Protocol (LDP), Super backbone, SHAM Link, MPLS PE-CE connection troubleshooting.
- Actively involved in Switching Technology Administration including creating and managing VLANS, Port security- 802.1x, Trunking 802.1Q, Inter-VLAN routing, ether channels and LAN security on Cisco Catalyst Switches 3800,3900,4507R+E, 6509-E
- Switching related tasks included configuring VTP, Inter-VLAN Routing, EtherChannel (LACP & PAgP) and RPVST+ for loop avoidance.
- Implemented redundancy / Failover using HSRP
- Designed and implemented DMZ for Web servers, Mail servers & FTP Servers using Cisco ASA5500 Firewalls.
- Configuring Static EIGRP, and OSPF Routing Protocols on Cisco 2600, 2800, 3600, 3800, 7300 series Routers
- Experience working with Nexus 9504,7010, 5548, 5596, 2148, 2248 devices.
- Experience with configuring FCOE using Cisco nexus 5548
- Experience configuring VPC, VDC and ISSU software upgrade in Nexus 9504
- Worked with Cisco Nexus 2148 Fabric Extender and Nexus 9300 series to provide a Flexible Access Solution for datacenter access architecture.
- Configuring the Voice VLAN's (VOIP) and Prioritizing the voice traffic over the data traffic
- Performing network monitoring, providing analysis using various tools like Wireshark, Solar winds etc.
- Configuring F5 Load balancer LTMs and GTMs to isolate traffic from the web servers.
- Managed the F5 BIG-IP GTM/LTM appliances to include writing iRules, SSL offload and everyday task of creating WIP and VIPs.
- Responsible for managing activities, Upgrading IOS Upgrading hardware and installing new devices including standardization for the topology.
- Mapped, Network Diagrams and physical identification in MS Visio.
- Be on call rotation and provide 24X7 support in that time and handle Office's branches during this timeframe if a network problem occurs.

Adobe - Houston, TX - May 2014 to April 2015

- Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
- Analyzed customer application and bandwidth requirements, ordered hardware and circuits, and built cost effective network solutions to accommodate customer requirements and project scope.
- Configuring, Maintaining the Routers and Switches and Implementation of EIGRP, OSPF, BGP routing protocols and trouble shooting
- Design and Implementation of complex networks related to extranet clients.

- Network consists of Heavy Cisco equipment such as Cisco 3560 2950 2924 switches, Cisco 6509 6513 5500 series Layer 3 switches, Cisco 3825 3640 7200 series routers, Cisco Pix firewall 500 series and Wireless Access points Cisco 1230.
- Experience working with Cisco Nexus 2148 Fabric Extender and Nexus 5000 series to provide a Flexible Access Solution for datacenter access architecture.
- Installed and configured Cisco routers using routing protocols such as EIGRP.
- Managed the IP address space using subnets and variable length subnet masks (VLSM).
- Providing technical security proposals, installing and redesigning customer security architectures.
- Worked on F5 BIG-IP LTM 8900, configured profiles, provided and ensured high availability.
- Worked on F5 and CSM load balancers deploying many load balancing techniques with multiple components for efficient performance.
- Configured route policy for BGP and manipulated BGP attributes using route-maps, ACL, AS-Path list, AS prepend per customer requirements.
- Configuring and troubleshooting STP, VTP, HSRP and Trunking in enterprise switched environment.
- Involved in migration of Frame-relay connections to MPLS based technology with the extranet clients.
- Troubleshooting the TCP/IP networks for connectivity, outages and slow network issues and recommended appropriate and cost-effective solutions for the congestion.
- Troubleshooting the Network Routing protocols (BGP, EIGRP and RIP) during the Migrations and new client connections.
- Involved in meetings with engineering teams to prepare the configurations per the client requirement.

Level 3 Communications - Broomfield, CO - October 2012 to April 2014

- Maintain, configure, and analyze network and host-based security platforms.
- Configured policy statements, routing instances, route manipulation on OSPF and BGP.
- Planning and implementation of IP addressing scheme using Subnetting, VLSM.
- Assisted in backup, restoring and upgrading the Router and switch IOS.
- Worked with the data center planning groups, assisting with network capacity and high availability requirements.
- Configuration and troubleshooting of Cisco Routers such as Cisco 3640, Cisco GSR 12416, 21418(with PRP and RPR processors), Cisco catalyst 6509, 7613 with supervisor cards
- Involved in the configuration & troubleshooting of routing protocols: MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4.
- Good knowledge in configuring and troubleshooting Exterior Gateway protocols such as BGPv4 including internal BGP (IBGP) and external BGP (EBGP).
- Worked on Route-Reflectors to troubleshoot BGP issues related to customer route prefixes also route filtering using Route-maps.
- Configured EBGP for CE to PE route advertisement inside the office environment
- Worked with multiple customers over a period to enhance their network, resolve and do the RCA (root cause analysis) for in service production problems and create work around for known IOS issues.
- Performed load balancing and application level redundancy by deploying F5 BIG-IP LTM 6900.
- Configuring VLANs and implementing Inter VLAN routing.
- Hands-on experience with WAN (ATM/Frame Relay), Routers, Switches, TCP/IP, Routing Protocols (BGP/OSPF), and IP addressing.
- Layer 2 switching technology architecture, implementation and operations including L2 and L3 switching and related functionality. This includes the use of VLANS, STP, VTP and their functions as they relate to networking infrastructure requirements including internal and external treatment, configuration and security.
- Responsible for service request tickets generated by the helpdesk in all phases such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support

- Supporting EIGRP and BGP based PwC network by resolving level 2 &3 problems of internal teams
- Documentation of Managed customer database such as IP addresses, passwords, interfaces, network diagram.
- Responsible for network availability, network redundancy, bandwidth planning, routing issues.

Slim Line Solutions - IN - March 2011 to August 2012

- A core member of networking team and provided end client system support.
- Key contributions include troubleshooting of complex LAN/WAN infrastructure that include routing protocols EIGRP, OSPF and BGP.
- Troubleshot complex routing and switching issues in a HSRP and GLBP environment.
- VLAN design and Implementation for new network requirements, including VLAN bridging and multi-port Trunks.
- Responsible for maintenance and utilization of VLANs, Spanning-tree, HSRP, VTP of the switched multilayer backbone with catalyst switches.
- Implemented redundant Load balancing technique with Internet applications for switches and routers.
- Support Network Technicians as they require training & support for problem resolution including performing diagnostics, & configuring network devices.
- Configured and troubleshoot OSPF and EIGRP.
- Configured VLANS using VTP protocol and implemented redundancy using STP protocol in switched Network.
- Configured Access List (Standard, Extended, and Named) to allow users all over the company to access different applications and blocking others.
- Used Network Monitoring tool to manage, monitor and troubleshoot the network.
- Back up a Cisco IOS to a TFTP server and Upgraded and restored a Cisco IOS from TFTP server.
- Was responsible in IOS upgrade of CISCO switches and routers which are owned by our team.
- Configured Cisco IOS Feature Set, NAT and Simple Network Management Protocol (SNMP) for Network Security implementation.
- Received inbound calls of technical nature, independently resolved customer complaints, concerns and inquiries regarding their Internet connection.

#### **SKILLS**

BGP. (5 years), Cisco (6 years), EIGRP (5 years), OSPF (5 years), Security (6 years)

### ADDITIONAL INFORMATION

#### Technical Skills:

- Routers: Cisco ASR 1002 / 1006 / 7304 / 7206 / 3945 / 2951 / 2600
- Switches: Cisco Catalyst: 6513 / 6509 / 4900 / 3945 E / 3750-X / Nexus 9K,7K,5K,2K
- Firewall: Cisco ASA [...] Palo Alto -5050
- Routing Protocols: OSPF, EIGRP, BGP, ISIS, VRF, PBR, Route Filtering, Redistribution, Summarization, Static Route
- Protocols: TCP/IP, IPSEC, IKE, SSL, SSH, UDP, DHCP, DNS
- LAN: Ethernet, Fast Ethernet, Gigabit Ethernet
- WAN: VPN, IPSEC-VPN, MPLS, ATM, Frame Relay
- Redundancy protocol: HSRP, VRRP, GLBP, EBGP
- Network Management Tools: Wireshark, Net flow Analyzer, SNMP, HP open view.
- Security Server Protocols: TACACS+, RADIUS.

- Load Balancers: F5 Networks (BIG-IP) LTM 5050
- Operating Systems: Windows Vista, Windows 7/8, Linux