

Manoj Kumar

Sr. Network Engineer - Synechron

Charlotte, NC - Email me on Indeed: [indeed.com/r/Manoj-Kumar/436aa954204e7b6b](https://www.indeed.com/r/Manoj-Kumar/436aa954204e7b6b)

- 7+ years of experience in Networking, including hands-on experience in providing network support, installation and analysis for a broad range of LAN / WAN/ MAN communication systems. Handling cisco and HP network devices.
- Proficient in Cisco IOS for configuration & troubleshooting of routing protocols: MP-BGP, OSPF, EIGRP, RIP, BGP v4, MPLS.
- Working knowledge in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-Vlan routing, LAN security.
- Configured Cisco ISE for Wireless as well as hands on experience in configuring Cisco Catalyst 2960, 3750, 4500, 6500 and Nexus 2000, 5000, 6000, 7000 series switches and Cisco 2600, 2800, 3600, 3800, 7200, 7600 series routers, Load Balancers & Cisco Firewalls
- Cisco Prime Infrastructure deployment.
- Worked on Linux and Unix OS.
- Data Networks Design and implementation. (WAN, WLAN, LAN) DNS configuration and Management with QIP and Bind, DNS / DHCP windows experience WLAN Design and implement) Cisco WLCs and Standalone Aps.
- Build WLAN monitoring site maps in the Cisco Prime Infrastructure system.
- Hands on experience in configuring and supporting site-to-site and remote access Cisco, IPSec, VPN/ DMVPN solutions using ASA/PIX firewalls, Cisco and VPN client.
- Services Engine (ISE), ACS (Radius and TACACS+).
- Advanced knowledge in TCP/IP suite and routing protocols, such as OSPF, BGP, EIGRP, multicast, IPSEC VPN design connection & protocols, IPSEC tunnel configuration, encryption and integrity protocols.
- Knowledge of implementing and troubleshooting complex layer 2 technologies such as VLAN Trunks, VTP, Ether channel, STP, RSTP and MST. Implementation of HSRP, VRRP for Default Gateway Redundancy.
- Involved in troubleshooting of DNS, DHCP and other IP conflict problems.
- Experience in working with Cisco Nexus Switches and Virtual Port Channel configuration.
- Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability.
- Knowledge of Cisco configurations focused on Routing, QOS, MPLS Multicast and Security.
- Worked on various traffic monitoring systems like NIPS, WIPS, HIPS using signature-Based Detection as intrusion detection system.
- 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.
- Configuring, Administering and troubleshooting the Checkpoint, Palo Alto, and ASA firewall.
- Worked on WSA S190, S390 in order to block risky sites.
- Configuration of Network and Security devices such as Cisco routers and switches (Cisco [...] 7K/5K), Firewall (Checkpoint R75/Gaia and Cisco FWSM), Load Balancers and DNS and IP Manager (Infoblox).
- I manage and keep up to date the IP Addressing for Data Centers. I use VitalQIP to accomplish this.
- Experience in testing Cisco routers and switches in laboratory and deploy them on site production.
- Experienced in deploying and troubleshooting multiple voice technologies like POTS, VoIP.
- In-depth knowledge and hands-on experience in Tier II ISP Routing Policies, Network Architecture, IP Subnetting, VLSM, TCP/IP, NAT, DHCP, DNS, FT1 / T1 / FT3 / T3 SONET POS OCX / GigE circuits, Firewalls.
- Experienced in using Cisco Identity Services Engine (ISE).
- Strong knowledge of TACACS+, RADIUS implementation in Access Control Network.

- Experience in Designing and assisting in deploying enterprise wide Network Security and High Availability Solutions for ASA.
 - Configuration of F5's Big IP for Application Load Balancing.
 - Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASA 5500/PIX security appliance, Failover DMZ zoning& configuring VLANs/routing/NAT with the firewalls as per the design.
 - Knowledge in preparing Technical Documentation and presentations using Microsoft VISIO/Office.
 - Worked with F5s Big-IP 6900 Series Platform and the Viprion 2400.
 - Excellent customer management/resolution, problem solving, debugging skills and capable of quickly learning, effectively analyses results and implement and delivering solutions as an individual and as part of a team.
 - Experience in designing MPLS VPN and QoS for architecture using Cisco multi-layer switches.
 - Configuring BGP/OSPF routing policies and designs, worked on implementation strategies for the expansion of the MPLS VPN networks.
 - Excellent customer management/resolution, problem solving, debugging skills and capable of quickly learning, effectively analysing results and implement and delivering solutions as an individual and as part of a team.
 - Expertise in creating groups and pruning traffic flow using VLAN, VTP, ISL, 802.1Q.
 - Working experience with REMEDY, HP OPENVIEW for ticket change management process.
- Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Sr. Network Engineer

Synechron - Charlotte, NC - June 2016 to Present

Responsibilities:

- Experience with manipulating various BGP attributes such as Local Preference, MED, Extended Communities, Route-Reflector clusters, Route-maps and route policy implementation.
- Experience with design and implementation of Data centre migration.
- Deploying and decommission of VLANs on core ASR 9K, Nexus 7K, 5K and its downstream devices.
- Experience in Designing, Racking, stacking, configuring and troubleshooting of Cisco IOS Devices, Cisco Nexus Devices and CiscoUCS servers for large environments.
- Performed OSPF, BGP, DHCP Profile, HSRP, IPV6, Bundle Ethernet implementation on ASR 9K redundant pair.
- I worked with the engineers to develop a minimally invasive implementation of cisco Nexus 9k switching with a design to move toACI.
- Configured CIDR IP RIP, PPP, BGP, MPLS and OSPF, PIMrouting.
- Design, implement, execute and debug information technology test cases and script as QA.
- Assisted in MPLS migrations, implemented a backup for the existing WAN connection using site-to-site IP sec VPN/DMVPN tunnels.
- Monitoring network traffic using tools like ZENOSS, CISCO NCM, NETSCOUT and QRADAR.
- Configuring and installing 6500, 4500 in Campus networks.
- Switches Replace branch hardware with new 2851 routers and 2960 switches.
- Convert Branch WAN links from TDM circuits to MPLS and to convert encryption from IPSec/GRE to GetVPN.
- Schedule configuration backups of network devices utilizingvovence.
- Working experience with routing and network service protocols (e.g. OSPF, MPLS, Multicast, SNMP, IPv6).
- Configuration of ACLs in Cisco 5540 series ASA firewall for Internet Access requests for servers in LAN and particular DMZ and also for special user requests as authorized by management.

- Experience with F5 various iSeries and Viprion series hardware, configuration of LTM and DNS (GTM) modules. Training on ASM, APM, AFM modules and developing custom iRules.
- Configure & troubleshoot IPsec VPN issues.
- Experience on HP devices and Aruba hardware.
- Dynamic IP Routing protocols (OSPF, EIGRP, BGP, Multicast).
- Lead Engineer for Network refresh project for Multinational insurance company. Providing remote assistance for replacing existing switches with new Cisco switches.
- Configuring routing protocols OSPF, EIGRP, RIP, MPBGP, LDP and BGPV4
- Configuring HSRP between VLANs, Configuring Ether-Channels, and Port Channel on 6500 catalyst.
- Configured OSPF and Static routing on Juniper M and MX series Routers and had a good hands on Juniper data center switches like QFX series.
- Configured Cisco ISE for Wireless and Wired 802.1x Authentication on Cisco Wireless LAN Controllers, Catalyst Switches, and Cisco ASA Firewalls.
- Deployment and support of F5 LTM/GTM 1600, 3600, 6900 and Viprion Chassis running OS versions 9.x through 11.x.
- Build Logical design and Implementation of Wireless Solution.
- Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability. Involved in the configuration & troubleshooting of routing protocols: MP-BGP, OSPF, PIM, LDP, EIGRP, RIP, BGPv4. Configured IP access filter policies.
- Managed IP address DNS and DHCP for the network using Infoblox.
- Deploying and decommissioning Cisco switches and their respective software upgrades.
- Performing the ACL requests change for various clients by collecting source and destination information from them.
- Maintained complex LAN/WAN networks with several VLANs and provided support for routing protocols and also providing secure sessions over internet using IPsec and SSL encryption.
- Operating F5 Big IP and VIPRION systems.
- Installed high availability Big IP F5 LTM and GTM, ASM load balancers to provide uninterrupted service to customers.
- Monitored and analysed network traffic using TAP and SPAN.
- Supporting EIGRP and BGP based on the network by resolving level 2 & 3 problems of internal teams & external customers of all locations
- Performing troubleshooting on slow network connectivity issues, routing issues that involves OSPF, BGP and identifying the root cause of the issues.
- Building the VPN tunnel and VPN encryption.
- Involved in Configuration of Access lists (ACL) on ASA firewall for the proper network routing for the B2B network connectivity.
- Configure and manage ASAFireSIGHT Management Center to implement Next-Gen firewall technologies such as Sourcefire's Advanced Malware Protection and URL filtering to enhance network security.
- Deploying Cisco WSA and Bluecoat Proxy SG (Web Security Appliance) S170 for URL filtering Policies.
- To secure configurations of load balancing in F5, SSL/VPN connections, Troubleshooting CISCO ASA firewalls, and related network security measures.
- Worked with F5 Load balancing, IDS/IPS, Bluecoat proxy servers and Administrating.
- Provided proactive threat defence with ASA that stops attacks before they spread through the network.
- Implemented Zone Based Firewalling and Security Rules on the Palo Alto firewalls.
- Configuring rules and Maintaining Palo Alto firewalls & Analysis of firewall logs using various tools.
- Created new DHCP scopes and reserved DNS entries for IPs using Infoblox
- Design, implementation and operational support of routing/switching protocols in complex environments including BGP, OSPF, EIGRP, Spanning Tree, 802.1q, etc.

- Worked with creating VIP (virtual servers), pools, nodes and applying iRules for the virtual servers like cookie persistency, redirection of the URL.
- Created Visio Dean / Visio Documentation to give complete picture of network design for each building.
- Experience in Configuring, upgrading and verifying the NX-OS operation system.

Network Engineer

C & S Wholesale Grocers - Charleston, SC - February 2014 to May 2016

Responsibilities:

- Configuring HSRP between the 3845 router pairs for Gateway redundancy for the client desktops.
- Upgrade Cisco Routers, Switches and Firewall (PIX) IOS using TFTP
- 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
- 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 & external customers of all locations.
- Configuring Big-IP F5 LTMs (virtual servers, pools, SNATs, health monitors, irules) for managing the traffic and tuning the load on the network servers.
- Implemented requested rules on firewalls to allow clients to gain access to servers and certain ports. Implemented urgent changes.
- Engineered configurations and firewall rules for corporate and retail test environment, prior to deploying to production.
- Updated the HP open view map to reflect and changes made to any existing node/object.
- Handled SRST and implemented and configured the Gateways, Voice Gateways..
- Configuring STP for switching loop prevention and VLANs for data and voice along with Configuring port security for users connecting to the switches.
- Ensure Network, system and data availability and integrity through preventive maintenance and upgrade.
- Implementation and Configuration (Profiles, I Rules) of F5 Big-IP C2400 load balancers
- Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-Vlan routing, LAN security.
- Worked on the security levels with RADIUS, TACACS+.
- Worked on Arista 7250QX series switches to build spine aggregation switching.
- Successfully installed Palo Alto PA 3060 firewalls to protect Data Center and provided L3 support for routers/ switches/firewalls.
- Involved in Configuration of Access lists (ACL) on Juniper and Palo Alto firewalls for the proper network routing for the B2B network connectivity.
- Implemented Zone Based firewall and Security Rules on the Palo Alto firewalls using Panorama.
- Identify, design and implement flexible, responsive, and secure technology services.
- Performed load balancing and application level redundancy by deploying F5 BIG-IP LTM 3900.
- Configured switches with port security and 802.1x for enhancing customers security.
- HP Network Node Manager i, Solarwinds Orion and BMC Network Automation.
- Validate existing infrastructure and recommend new network designs.
- Created scripts to monitor CPU/Memory on various low end routers in the network.
- Handled installation of Windows NT Server and Windows NT Workstations.

Network Engineer

HGST - San Jose, CA - October 2012 to December 2013

Responsibilities:

- Work with Active Directory, DNS, and DHCP for internal zones of the network.

- Cisco ASA/Checkpoint Firewall troubleshooting and policy change requests for new IP segments that either come on line or that may have been altered during various planned network changes on the network.
- Experience deploying BIG-IP F5LTM Load Balancers for load balancing and traffic management of business application.
- Configuring F5 LTM 8950, 6900, VIPRION 2400 models.
- Managed DDI services via infoblox application platform. Successful configuration of the Infoblox system to meet client needs also calls for an ability to quickly grasp client-specific current solutions for DNS, DHCP, and IPAM (DDI).
- Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
- Responsible for Checkpoint and Cisco ASA firewall administration across global networks.
- Generating RCA (Root Cause Analysis) for critical issues of layer1/layer2/layer3 problems.
- Co-ordinated with the Data Network and Security team and came up with possible solutions.
- Work on Physical site Inventory verification, gather information of various Cisco Network devices and Security Devices to develop Run book and Spec Book.
- Configuration of F5's Big IP for Application Load Balancing as well as checking for automation test services for QA.
- Created new DHCP and reserved DNS entries for IPs using IP manager (infoblox).
- Configuration and Integration of Cisco Identity Services Engine (ISE) 1.2.
- Cisco ASA/Checkpoint Firewall troubleshooting and policy change requests for new IP segments that either come on line or that may have been altered during various planned network changes on the network.
- BIG-IP products and VIPRION Chassis. Network planning of the racks and the devices along with assigning
- Configuration and troubleshooting of Cisco catalyst 6509, 7613 with supervisor cards.
- Controlling the URL access by using the Bluecoat proxy servers and also McAfee web gateway.
- Experience with implementing and maintaining network monitoring systems (Cisco works and HP Open view) and experience with developing complex network design documentation and presentations using VISIO
- Estimated Project costs and created documentation for project funding approvals.
- Monitoring and troubleshooting network issues between client site and 85 remote sites with legacy switches and routers
- Performed and presented network analysis as a part of network migration. Involved in knowledge transfer to vendors and provided them network support as required
- Worked as a single point of contact for the whole migration
- Configuration and maintenance of EIGRP and BGP network on router 7200 and 6500 MLS.
- Configuration and maintenance of 3750 stack and 6500 VSS for improved efficiency of the data plane.
- Configuration and management of NEXUS network in the existing network infrastructure.
- Created LAB setup with 7k and 5K NEXUS switches for application testing.

Network Engineer

KPIT - Pune, Maharashtra - June 2009 to September 2012

Responsibilities:

- 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 & external customers of all locations.
- Upgrade Cisco Routers, Switches and Firewall (PIX) IOS using TFTP
- Performed work on bluecoat servers.
- Performed basic security and ACL administration on Juniper SRX firewalls. That includes day to day rule deployment, troubleshooting using data flow analysis and packet capture.
- Updated the HP open view map to reflect and changes made to any existing node/object.

- Handled SRST and implemented and configured the Gateways, Voice Gateways.
- Configuring HSRP between the 3845 router pairs for Gateway redundancy for the client desktops.
- Configuring STP for switching loop prevention and VLANs for data and voice along with Configuring port security for users connecting to the switches.
- Ensure Network, system and data availability and integrity through preventive maintenance and upgrade.
- Working experience on Juniper J seriesj230, M 320 routers and EX 3200 series switch.
- Involved in L2/L3 Switching Technology Administration including creating and managing VLANs, Port security, Trunking, STP, Inter-VLAN routing, LAN security.
- Worked on the security levels with RADIUS, TACACS+.
- Configured topologies using pearl.
- Completed service requests (i.e. - IP readdressing, bandwidth upgrades, IOS/platform upgrades, etc.)
- Identify, design and implement flexible, responsive, and secure technology services.
- Configured switches with port security and 802.1x for enhancing customers security.
- Monitored network for optimum traffic distribution and load balancing using Solar winds.
- Validate existing infrastructure and recommend new network designs.
- Handled Tech Support as it relates to LAN & WAN systems.

SKILLS

BGP (7 years), CISCO (7 years), EIGRP (7 years), SECURITY (7 years), HSRP (6 years)

ADDITIONAL INFORMATION

Technical Skills:

Routers: Cisco 7600, 7200, 3800, 3600, 2900, 2800, 2600, 1800, 1700

Routing: OSPF, EIGRP, BGP, and RIP v1/v2, PIM, PBR, Route Filtering, Redistribution, Summarization, and Static Routing.

Switches: Nexus 2K/5K/7K, Cisco Catalyst 2900, 3500, 3700, 6500, [...] 3560, 3750, 2960

Switching: LAN, VTP, STP, PVST+, RPVST+, Inter VLAN routing & Multi-Layer Switch, Ether channel, Transparent Bridging.

Network Security: Cisco ASA 5540, ACL, IPSEC, F5 Load Balancer, Checkpoint, Palo Alto

Load Balancer: F5 Networks (Big-IP) LTM 8900 and 6400.

LAN: Ethernet (IEEE 802.3), Fast Ethernet, Gigabit Ethernet

WAN: PPP, HDLC, Channelized links (T1/T3), Fiber Optic Circuits, Frame Relay, VOIP

Gateway Redundancy: HSRP and GLBP

Various Features & Services: IOS and Features, IRDP, NAT, SNMP, SYSLOG, NTP, DHCP, CDP, TFTP, FTP.

SOFTWARE: Linux, Windows, DNS/IPAM, Infoblox, Shell bash scripts,

Perl, Vmware, Microsoft Office (Excel, Word, PowerPoint, Visio), CA Service Desk (Change Management).

AAA Architecture: TACACS+, RADIUS, Cisco ACS.

Network Management: Wireshark, SNMP, Solarwinds