

Keerthi S

Network Engineer - IBM Global Services

Charlotte, NC - Email me on Indeed: [indeed.com/r/Keerthi-S/a4db1bd657a17a38](https://www.indeed.com/r/Keerthi-S/a4db1bd657a17a38)

- Over 8+ years of experience as a Network Engineer with expertise in design, development, implementation, troubleshooting and maintenance of Network Devices like Routers, Switches and security environments with Firewalls, Proxy, VPN's, IPsec, NAT, Load Balancer's.
- Expertise in design, configuring, supporting and administrating Cisco routers, switches, Nexus switches, Load balancers (F5) and firewalls.
- Experience in Routing protocol configurations: OSPF, RIP, BGP and EIGRP.
- Excellent working knowledge of TCP/IP protocol suite and OSI layers.
- Worked on network topologies and configurations, TCP/IP, UDP, Frame Relay, Token ring, ATM, bridges, routers, and Switches
- Experience in addressing Cisco infrastructure issues, monitoring, debugging like routing, WAN outages, Network Hardware/Software failure, configuration and performance issues
- Strong hands on experience in installing and troubleshooting Cisco routers such as [] series and Cisco Catalyst switches like [] and 3500XL series.
- Expertise with IP Subnetting, VLSM, CIDR.
- Experience in troubleshooting of DNS, DHCP and other IP conflict problems
- In depth knowledge and experience working with other protocols like TCP/IP, OSI model, DHCP, DNS, SMTP, IMAP, FTP, WAN, LAN, NAT, PAT, ACL, VLANs, Trunking using 802.1Q, IPv4, IPv6, LDAP, HTTP, HTTPS, UDP, VOIP, QOS.
- Expertise in configuring switching protocols such as ARP, RARP, VTP, PPP, VLAN, STP, RSTP, PVST+, HSRP, GLBP, VRRP and Routing Protocols such as RIP, OSPF, BGP, EIGRP, IS-IS, and MPLS
- Manage day-to-day operations and configuration of Check Point firewalls.
- Configuration and administration of DNS and DHCP servers
- Configuring, Administering and troubleshooting the Palo Alto firewall.
- Experience in adding Rules and Monitoring Checkpoint Firewall traffic through Smart Dashboard and Smart View Tracker applications
- Hands on experience in deploying, maintaining and troubleshooting Cisco ASA firewall and implemented adding, removing and editing firewall policies and rules as per the requirements.
- Expertise in configuring and troubleshooting complex layer 2 technologies such as VLANs, VTP, Ether Channels, Spanning Tree Protocol STP, RSTP and MST and redundancy protocols like HSRP, VRRP, GLBP.
- Implemented traffic filters using Standard and Extended access-lists, Distribute-Lists, and Route Maps.
- Experience in IPSEC VPN design connection and protocols, IPSEC tunnel configuration, encryption and integrity protocols
- Experience with Windows server products and Linux server products.
- Good knowledge in wireless networks.
- Good Knowledge and experience in IPV4, IPV6, RIP, EIGRP, OSPF, BGP, DHCP, DNS.
- Implementing and configuring Big IP F5 LTM and GTM.
- Upgraded configuration changes, implement the Firewall Rules, configure the NAT, implement the new VPN, troubleshooting and handling the incident on number of vendor's Firewalls (ASA, Checkpoint) and other security products
- Design and configuring of OSPF, BGP on Juniper routers (MX960)
- Efficient at use of Microsoft VISIO/Office as technical documentation and presentation tools
- Experience working with Nexus 7K, 5K, 2K devices
- Excellent 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.

Willing to relocate: Anywhere

Willing to relocate: Anywhere

WORK EXPERIENCE

Network Engineer

IBM Global Services - Charlotte, NC - February 2016 to Present

Responsibilities:

- Involved in complete LAN, WAN development (including IP address planning, designing, installation, configuration, testing, maintenance etc.).
- Installation and maintenance of Cisco Layer 3 switches 3750, 4500X, 6500 in multi VLAN environment.
- Troubleshoot and resolved network issues using Wireshark.
- Configuring EIGRP, OSPF and BGP on cisco routers.
- Extensively worked on TCP/IP protocols and transport protocols like TCP and UDP.
- Designed, Implemented and Troubleshot Cisco 3750, 3550, 3560, 2924, 6509-V-E, 6513, 6504, 6503, 6506, 6500 series switch, GSR, ASR routers with Cisco IOS and IOS-XR and NX.
- Installed, configured and managed Cisco routers such as 7200 series, 3800 series, 3700 series, 2800 series and Cisco Catalyst switch series 6500, 4500, 3500, and 2900.
- Configuring LAN protocols like STP, RSTP, MST, VTP, VLAN and Port Channel Protocols like LACP, PAGP.
- Install and support temperature sensing monitors, power strips, server cabs, wireless access points.
- Experience in Cisco: Physical cabling, IP addressing, Wide Area Network configurations (Frame-relay & MPLS), Routing protocol configurations (RIP, IGRP, EIGRP, OSPF, BGP IBGP).
- Checkpoint firewall Log Maintenance and Policy Maintenance. Troubleshooting complex Checkpoint issues, Site-to-Site VPN related.
- Monitoring Traffic and Connections in Checkpoint and ASA Firewall.
- Enabled STP attack mitigation (BPDU Guard, Root Guard), using MD5 authentication for VTP, disabling all unused ports and putting them in unused VLAN.
- Configured SSH, HTTP secure server access and synchronized time source using NTP
- Supported EIGRP and BGP based on the network by resolving level 2 & 3 problems of internal teams & external customers of all locations.
- Worked on Layer 2 protocols such as STP, VTP, RSTP, PVSTP+, MST and other VLAN troubleshooting issues and configuring switches from scratch and deployment.
- Analyze network traffic and troubleshoot issues for customers that are not able to implement their application due to network connectivity issues.
- Troubleshooting of problems related to routing protocols involving OSPF, EIGRP, BGP, MPLS, IP Multicasting, IS-IS and layer 2 technologies.
- Work on network tickets to resolve network connectivity as part of break-fix and thus contribute to overall network health in a stipulated amount of time as per SLA.

Environment: Cisco Routers, Cisco Switches, Nexus 7k/5k/2k Routing protocols, F5, Load Balancer HSRP, VRRP, IPSEC VPN, VPN, QOS, ASA firewall, Checkpoint, Load balancer, MPLS, VLANS, VTP, RSTP, ACL, NAT, IDS/IPS, SIP, RTP, RADIUS, TACACS+, ASR 9000, Catalyst 6500, CRS, Cisco ASA Firewall.

Network Engineer

Capital One - McLean, VA - September 2014 to December 2015

Responsibilities:

- Configured Routing protocols such as RIP, OSPF, EIGRP, static routing and policy based routing.

- Troubleshooting the Network Routing protocols (BGP, EIGRP and RIP) during the Migrations and new client connections.
- Redesign of Internet connectivity infrastructure for meeting bandwidth requirements.
- Configuration and troubleshooting of Cisco 2500, 2600, 3000, 6500 Series routers.
- Technical assistance for LAN/WAN management and complex customer issues.
- Provided support for troubleshooting and resolving Customer and user reported issues.
- Worked with Network Engineer's in the installation and configuration of firewalls.
- Configuring, implementing and troubleshooting VLAN's, VTP, STP, Trunking, Ether channels.
- Packet capturing, troubleshooting on network problems with Wireshark, identifying and fixing problems
- Implementing, configuring, and troubleshooting various routing protocols like RIP, EIGRP, OSPF, and BGP etc.
- Performing network monitoring, providing analysis using various tools like Wireshark.
- Generating RCA (Root Cause Analysis) for critical issues of layer1/layer2/layer3 problems.
- Have experience on Configuration of Inter-VLAN routing
- Experience in installing and configuring DNS, DHCP server.
- Configured and implemented access control list.
- Cisco ASA 5540 firewall experience creating access rules for various DMZ containers for both inbound and outbound traffic.
- Involved in troubleshooting of DNS, DHCP and other IP conflict problems.
- Responsible for layer 2 securities which was implemented using a dedicated VLAN ID for all trunk ports, setting the user ports to non-trunking, deployed port security when possible for user ports
- Configured Cisco ASA and Checkpoint firewall layers to secure the infrastructure for the Data Center.
- Switching (Ethernet) related tasks included implementing VLANs and configuring ISL trunk on Fast-Ethernet channel between switches.
- Configured the Cisco router as IP Firewall and for NATting.

Environment: Nexus 2K/5K/7K, F5 Big-IP LTM-6400 load balancer, Checkpoint R75, Cisco ASA, Check Point Firewall, Cisco ASA 5500 LAN, WAN, HSRP, RIP, OSPF, BGP, EIGRP, VLAN, MPLS, STP, RSTP

Network Engineer

FCA - February 2013 to July 2014

Responsibilities:

- 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).
- Actively managed IP Communications, audio/video conferencing, mobility, and presence.
- Responsible for the analysis/troubleshooting of large-scale enterprise VoIP networks.
- Configuring RIP, OSPF and Static routing on Juniper M and MX series Routers
- Configuring VLAN, STP, VSTP, SNMP on EX series switches
- Design, and configuring of OSPF, BGP on Juniper Routers and SRX Firewalls.
- Worked on HSRP for load balancing.
- Designing data communications and networks utilizing that utilize a mixture of frame relay,
- point to point T1, T3 & OC3 lines
- Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability
- Involved in design and implementation of Data Centre 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 paths for the packet prioritization and EIGRP tuning
- 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
- Manage Cisco Routers and troubleshoot layer1, layer2 and layer3 technologies for customer escalations
- Configuring IPSEC VPN on SRX series firewalls
- 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
- Drafted, installed, and provisioned Checkpoint firewall rules and policies.
- Installation, Configuration and Administration of ADS, DNS, DHCP and Web proxy (ISA)server
- 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
- Administration of Cisco 11.x and 12.1 versions and higher
- Monitored all Cisco equipment's using Cisco Works
- This includes Artifacts for regular Health Checks, IP and System Integrity, Change management, Problem management, Logical Access Controls, Network Connectivity, Service Registration and Performance Management
- Installed and configured the Cisco routers 2800 in two different customer locations. It includes coordinating with Verizon and AT&T to bring the serial interface up for T3 link. Also, configuration includes frame relay, BGP and VPN tunnel on GRE
- 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

Environment: Juniper firewalls 5GT, 208, SSG 5, 140, 550, 550M, NSM, IDS/IPS 6500/3750/3550/3500/2950 switches, Juniper (M320, T640), Load balancing, Cisco 7200/3845/3600/2800 routers, TACACS, EIGRP, RIP, OSPF, BGP, VPN, MPLS, Check Point Firewall, Ether Channels.

Network Engineer

GV Technology - Hyderabad, ANDHRA PRADESH, IN - April 2010 to January 2013

Responsibilities:

- 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 layer.
- Worked with telecom vendors in regard to network fault isolation.
- Hands-on experience with WAN (ATM/Frame Relay), Routers, Switches, TCP/IP, Routing Protocols (BGP/OSPF), and IP addressing.
- Configured RIP CIDR IP, PPP, BGP and OSPF routing.
- Involved in the configuration & troubleshooting of routing protocols: MP-BGP, OSPF, MPLS, LDP, EIGRP, RIP, BGP v4. Configured IP access filter policies.
- Management and Deployment on Checkpoint Firewall.

- Use Checkpoint to establish Point-to-Point tunnels.
- Ability to use NAT and Firewall security policies in Checkpoint.
- Experience In working on Configuring Multicast.
- Identify, design and implement flexible, responsive, and secure technology services
- Experience with Firewall Administration, Rule Analysis, Rule Modification
- Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
- Deployed 7613 as PE and CE router and Configured and troubleshoot the Edge Routers.
- Excellent troubleshooting knowledge on T1, T3, OC-3 and OC-12.
- Configured egress and ingress queues for ISP facing routers using CBWFQ.
- Generating RCA (Root Cause Analysis) for critical issues of layer1/layer2/layer3 problems.
- Configuration and troubleshooting of Cisco catalyst 6509, 7613 with supervisor cards.
- 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.

Environment: Net Flow, TACACS, EIGRP, RIP, OSPF, BGP, VPN, MPLS, CSM, SUP720, Ether Channels, Cisco 7200/3845/3600/2800 routers, Fluke and Sniffer, Cisco 6509/ 3750/3550/3500/2950 switches, Checkpoint firewalls (SPLAT).

Network Engineer

GV Technology - Hyderabad, ANDHRA PRADESH, IN - April 2009 to March 2011

INDIA

Responsibilities:

- Supporting EIGRP and BGP based PwC network by resolving level 2 & 3 problems of internal teams & external customers of all locations.
- Responsible for service request tickets generated by the help desk in all phases such as troubleshooting, maintenance, upgrades, patches and fixes with all around technical support
- Upgrade, Cisco Routers and Switches using TFTP.
- Configured RIP, PPP, BGP and OSPF routing.
- Support Complex 6500 /5500 Series Switches.
- Planning and configuring the routing protocols such as OSPF, RIP, and Static Routing on the routers.
- 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.
- Supporting High Volume, high revenue impacting operations, 24*7 setup, focusing on failsafe network.
- Experience in installing and configuring DNS, DHCP server.
- Configured and implemented access control list.
- Completed service requests (i.e. - IP readdressing, bandwidth upgrades, IOS/platform upgrades, etc.)
- Involved in L2/L3 Switching Technology Administration, including creating and managing VLANs, Port security, Trunking, STP, Inter-VLAN routing, LAN security.
- Modified internal infrastructure by adding switches to support server farms and added servers to existing MZ environments to support new and existing application platforms.
- Configure, verify, and troubleshoot trunking on Cisco switches
- Verify network status using basic utilities (including: ping, trace route, telnet, SSH, ARP, ipconfig)
- Coordination with Field Engineers for troubleshooting at customer end problems

Environment: EIGRP, RIP, Cisco 3845/3600/2800, OSPF, BGP, STP, VLAN, MPLS routers, Cisco 6509/3750/3550/3500/2950 switches.

SKILLS

BGP (7 years), Cisco (7 years), EIGRP (7 years), MPLS (7 years), OSPF (7 years), Cisco Routers, Cisco Switches, Nexus 7k/5k/2k Routing protocols, F5, Load Balancer HSRP, VRRP, IPSEC VPN, VPN, QOS, ASA firewall, Checkpoint, Load balancer, MPLS, VLANs, VTP, RSTP, ACL, NAT, IDS/IPS, SIP, RTP, RADIUS, TACACS+, ASR 9000, Catalyst 6500, CRS, Cisco ASA Firewall, Nexus 2K/5K/7K, F5 Big-IP LTM-6400 load balancer, Checkpoint R75, Cisco ASA, Check Point Firewall, Cisco ASA 5500 LAN, WAN, HSRP, RIP, OSPF, BGP, EIGRP, VLAN, MPLS, STP, RSTP. (8 years)

ADDITIONAL INFORMATION

SKILLS

BGP (6 years), Checkpoint (6 years), Cisco (6 years), EIGRP (6 years), MPLS (6 years)

ADDITIONAL INFORMATION TECHNICAL SKILLS:

Routers Cisco 1800, 2500, 2600, 2800, 3600, 3800, 7200, 7600, Juniper MX480, MX960

Switches Cisco 2900, 3500, 3700, 4500, 5000, 6500, Juniper EX2200, EX2500, EX3200, EX4200, EX4500, EX8200), Nexus []

Firewalls PIX, ASA, Checkpoint, Palo Alto Load Balancers F5 Big IP, A10

Routing Protocols RIP, EIGRP, OSPF, BGP, Redistribution, Summarization, Static Routing Switching Protocols VTP, STP, RSTP, PVST+, MST, VLANs, PAGP, LACP

Security Protocols IPsec, SSL, AAA, Access Lists, Prefix Lists, NAT, PAT, VPN LAN Technologies Ethernet, Fast Ethernet and Gigabit Ethernet, VLAN, Inter-VLAN. WAN Technologies Leased lines, Frame Relay, ATM, MPLS, DSL Modems

Network Management Tools Wireshark, Solar winds, Net flow Analyzer, HP open View, OPNET. Operating Systems UNIX, LINUX, WINDOWS 2000, 2003, XP, WINDOWS 7

Security Server TACACS+, RADIUS VOIP Devices Cisco IP phones Documentation MS Visio, MS Office