# KARUNAKAR networkengineer

# Security Engineer - Lansing Board Of Water & Light

Lansing, MI - Email me on Indeed: indeed.com/r/KARUNAKAR-networkengineer/800820458eae13ab

- \* 8 years of professional experience in Network Planning, Implementing, Configuring, Troubleshooting and Testing of networking system on both Cisco and Juniper Networks
- \* Experience with the escalation problems for Routing, Switching and WAN connectivity issues using ticketing system remedy
- \* Experience of routing protocols like EIGRP, OSPF, RIP, and BGP
- \* Worked on Cisco 7200, 3800, 3600, 2800, 2600, 1800 series Routers and Cisco 2900, 3500, 4500, 5500, series switches
- \* Extensive hands-on experience with complex routed LAN and WAN networks, routers, and switches
- \* Proficiency in configuration of VLAN setup over various Cisco Routers and Switches
- \* Experienced in trouble-shooting both connectivity issues and hardware problems on Cisco based networks
- \* Enhanced level of experience with OSPF, BGP, and TCP/IP
- \* Worked extensively on the SRX, Palo Alto, ASA Firewall's.
- \* Rich Experience in Security Analyst in installing and configuring the Firewalls for protecting the Computer Environment and Network.
- \* Strong Experience on Juniper Networks' Secure Services Gateway (SSG) and Integrated Security Gateway (ISG) appliances
- \* Good knowledge in QFX implementation.
- \* Great team player and able to work under pressure 24x7 duty rotation.
- \* Strong knowledge in HSRP, VRRP redundancy Protocols.
- \* Experience in physical cabling, IP addressing and sub netting with VLSM, configuring and supporting TCP/IP, DNS, installing and configuring proxies.
- \* Access control server configuration for RADIUS & TACAS+.
- \* Sound knowledge in CISCO firewalls, CISCO PIX, ASA 5500 series and CISCO ASA as well as encryption techniques.
- \* Good knowledge on the Application security and development methodologies.
- \* Strong knowledge on NSM and NETSCREEN security.
- \* Good experience in the F5 Reverse Proxy.
- \* Expert in the Network TROUBLESHOOTING.
- \* Responsible for implementing and maintaining ExpressRoute with Office 365.
- \* Understanding the JUNOS platform and worked with JUNOS upgrade of Juniper devices.
- \* Working with Juniper JUNOS operating system and working on M/ MX/ series routers. And SRX devices
- \* Configured and deployed VDC and VPC between Nexus 7018 and Nexus 5548 switches along with FEX 2248.
- \* Deployed Horizontal connectivity using OTV. Have a good understanding of Fabric Path.
- \* Implemented various EX, SRX & J series Juniper devices.
- \* Design and configuring of OSPF, BGP on Juniper Routers and SRX Firewalls.
- \* Good knowledge on implementation and Load Balancing of the A10.
- \* Good knowledge on Bluecoat proxy server SG• Knowledge of advanced technologies like VOIP, H.323, SIP, QOS, Multicasting, MPLS and MPLS-VPN
- \* Experience with 802.11x wireless technology.
- \* Implementation and Configuration (Profiles, I Rules) of F5 Big-IP 5050 LTM-6400 load balancers
- \* Hands-on Experience with CISCO Nexus 7000, Nexus 5000, and Nexus 2000 platforms.
- \* Sound knowledge of virtual firewalls like checkpoint VSX, IDS, IPS as well as encryption techniques.
- \* Good knowledge on the web/email filtering and the disk encryption & IDS/IPS,

#### WORK EXPERIENCE

# **Security Engineer**

Lansing Board Of Water & Light - December 2016 to Present

- \* Good experience in ASA Configuration (5525X & 5515X With Firepower services)
- \* Upgraded the version of the ASA WITH Firepower services and applied the Patches including the Hotfix to the version.
- \* Good knowledge on the IDS and IPS Of the Firepower services.
- \* Good knowledge on the Failing over of the Firewalls in the Active/ Standby Mode while configuring the Versions of Firewall's.
- \* Worked in the upgrading of the IOS Version of the Routers & Switches including Nexus 7k and C3750 using the TFTP Server.
- \* Worked on the ON-CALL Notation for the security Purposes for getting the Control Network to be in the Production stage.
- \* Worked on the Network Topology Mapper for getting the Maps Done and then Later exporting them in to Visio, including the Maps that are related to the Data Centers.
- \* Did the Monthly Patch Discovery For the all the Routers and Switches as a part of the security of the Devices that are presented in the Control & Corporate Side.
- \* Network security including NAT/PAT, ACL, and ASA Firewalls.
- \* Worked extensively on SSL/Vpn portals.

Used NETSCREEN as a security measure.

- \* Found out the Hash Values for the SolarWinds For Conforming that Both the Installed and the Downloaded files are same by conforming the Hash Values.
- \* Hands on experience in installing, configuring, maintaining, and troubleshooting Cisco Switches & Routers that are in the Both Corporate and Control Side.
- \* Experience with Project data and voice documentation tools & experience with developing network design documentation and presentations using VISIO.
- \* Troubleshooting the network with the Packet capturing in Wireshark and resolving the issue using the filtering of the packet capture using Different Modes of Filters over there.

## **Operations Engineer**

Acxiom Corporation - Conway, AR - March 2014 to November 2016

## Responsibilities:

- \* Experience with configuring Cisco 6500 VSS in Distribution layer of the Data center network
- \* Good experience in working with F5 Load Balancer.
- \* Configuration and Administration of Cisco and Juniper Routers and Switches
- \* Experience working with Nexus 7010, 5548, 5596, 2148, 2248 devices.
- \* Experience in working with NTP Servers.
- \* Good experience in working with the troubleshooting the servers situated in the Data Center.
- \* Troubleshooting the network with the Packet capturing in Wireshark and resolving the issue using the filtering of the packet capture using TCP/IP filtering there.
- \* Worked in adding the static Routes to the Router, which is configured by BGP protocol.
- \* Installation of the SSL Certificates in the F5 BIGIP, after the creation of the CSR. Then installed the SSL Certificate in the VIP (Virtual Server) in the F5 Big IP.
- \* Modified the existing VIPS in the Palo Alto's firewall after taking the Change Request for the modification of the VIP's.

- \* Experience with moving data center from one location to another location, from 6500 based data center to Nexus based data center
- \* Network Redesign for Small Office/Campus Locations. This includes changes to both the voice and data environment.
- \* Strong Experience on ISG 1000 and 2000 for securing Data in the larger firms.
- \* Network security including NAT/PAT, ACL, and ASA Firewalls.
- \* Worked extensively on SSL/Vpn portals.
- \* Used NETSCREEN as a security measure.
- \* Worked extensively on Cisco ASA 5500(5510/5540) Series, experience with convert PIX rules over to the Cisco ASA solution.
- \* Good knowledge with the technologies VPN, WLAN and Multicast.
- \* Well Experienced in configuring protocols HSRP, GLBP, ICMP, IGMP, PPP, PAP, CHAP, and SNMP.
- \* 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 communicating with different with different customers, IT teams in gathering the details for the project.
- \* Used PAN for the Data transmission among the devices in the network.
- \* Installed dual DS-3 SAN replication WAN with Riverbed Interceptors and 6050 Steelhead appliances to optimize the traffic
- \* Configuring rules and Maintaining Palo Alto Firewalls & Analysis of firewall logs using various tools
- \* Switching tasks include VTP, ISL/802.1q, IPsec and GRE Tunneling, VLANs, Ether Channel, Trunking, Port Security, STP and RSTP.
- \* Rich knowledge in using 802.3 Ethernet Network.
- \* Experience in installing and configuring DNS, DHCP servers.
- \* Worked extensively on the A10 troubleshooting.
- \* Involved in the creation and the enforcement of the security (ISE) for the accessing of the endpoint devices that are connected to the routers and switches.
- \* Provided a campus wide wireless network utilizing Cisco 1200 access points and Cisco wireless 1410 WAN site-to-site bridges.
- \* Replace branch hardware with new 3900 routers and 2960 switches.
- \* 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.
- \* Convert Branch WAN links from TDM circuits to MPLS and to convert encryption from IPsec/GRE to GetVPN.
- \* 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.
- \* Installed and Configured the F5 BIG-IP LTM, configure virtual servers and associate them with pools for internal web servers.
- \* Hands on experience in installing, configuring, maintaining, and troubleshooting Cisco Switches, Cisco Routers, Juniper EX Switches, Juniper Routers and Cisco Nexus Switches.
- \* Involved in configuring Juniper SSG-140 and Check point firewall
- \* Enabled STP attack mitigation (BPDU Guard, Root Guard), using MD5 authentication for VTP, disabling all unused ports and putting them in unused VLAN and ensuring DHCP attack prevention where needed.

# **Network Engineer**

General Motors - Alpharetta, GA - January 2013 to February 2014

\* Configuring, Maintaining the Routers and Switches and Implementation of RIP, EIGRP, OSPF, BGP routing protocols and troubleshooting Remote infrastructure management of offices in different locations nationwide.

- \* Troubleshooting and escalation management of day-to-day issues for offices. Managing Co-location and Datacenter infrastructure in North America.
- \* Experience with Project data and voice documentation tools & experience with developing network design documentation and presentations using VISIO
- \* Security policy review and configuration in Palo Alto and Junipers Firewall in US offices and Datacenter.
- \* Involved in Configuration of Access lists (ACL) on checkpoint firewall for the proper network routing for the B2B network connectivity
- \* Created effective network security by migrating from Check Point FW-1 NG to ASA 5510 Firewalls
- \* Designed and configured of OSPF, BGP on Juniper Routers and SRX Firewalls.
- \* Worked extensively on the SRX firewall.
- \* Analyzed customer application and bandwidth requirements, ordered hardware and circuits, and built cost effective network solutions to accommodate customer requirements and project scope
- \* Installing, configuring, and maintaining Cisco Switches (2900, 3500, 7600, 3700 series, 6500 series) Cisco Routers (4800, 3800, 3600, 2800, 2600, 2900, 1800, 1700, 800)
- \* Built site-to-site IPsec VPNs over Frame-relay & MPLS circuits on various models of Cisco routers to facilitate adding new business partners to new and existing infrastructures.
- \* Configured RIP, PPP, BGP and OSPF routing.
- \* Implemented ExpressRoute with the Office 365.
- \* Responsible for Checkpoint firewall management and operations across our global networks.
- \* Working with Checkpoint Support for resolving escalated issues
- \* Data center migration was involved in Access, Distribution and Core layers
- \* Involved in the configuration & troubleshooting of routing protocols: MP-BGP, OSPF, LDP, EIGRP, RIP, BGP v4. Configured IP access filter policies.
- \* Experience with configuring Virtual Server and Configuring Load balancing methods in F5 LTM
- \* Experience with design and implementation of Data center migration.
- \* Expert in configuring Cisco Routers, Catalyst Switches, Nexus Switches.
- \* Upgrade Cisco 6500, 3750, 2960s, Nexus 5000, Nexus 2000, Nexus 7000 switch IOS software
- \* Worked extensively with Nexus 7000, 5000, 2000, Cisco 6500 series multilayer switches, Cisco 2960s series switches and Cisco 3560/3750s switches
- \* Strong Knowledge in working with F5 Load Balancers and their Implementation in various Networks.
- \* Identify, design and implement flexible, responsive, and secure technology services
- \* Implemented Positive Enforcement Model with the help of Palo Alto Networks.
- \* Used PAN Firewall as
- \* Innovated with support of Palo Alto for remote and mobile users and for analyzing files for malware in a separate (cloud-based) process that does not impact stream processing.
- \* Establish AWS technical credibility with customers and external parties
- \* Help customers build scalable, resilient, and high-performance applications and services on AWS
- \* Develop/capture/document architectural best practices for building systems on AWS
- \* Release management of all significant public EC2 launches
- \* Managed complex wireless network strategies and imparted support to operational wireless computer networks.
- \* Maintained wireless IPS infrastructure and coordinated with management, customers and peers regarding wireless network innovations.
- \* Used Reverse-proxy Firewall for the smooth flow of the traffic between clients & Servers.
- \* Offered users with wireless network technical support and handled indoor and outdoor site surveys.
- \* Experience with Firewall Administration, Rule Analysis, Rule Modification
- \* Deployed the switches in high availability configuration with HSRP.
- \* Configured UDLD, port-fast, uplink fast and other spanning tree features.
- \* Monitored network for optimum traffic distribution and load balancing using Solar winds.

- \* Implemented security measures to keep networks running and secure. Configured extended ACLs to filter traffic and gave restricted access to certain users.
- \* Supervised call center and technician routine maintenance and up-gradation of network device.
- \* Creating and provisioning Juniper SRX firewall policies.
- \* Worked for the team of DLP (Data Loss Prevention).
- \* Worked on NETSCREEN security in Juniper FW/VPN device.
- \* Provided network and workstation support.
- \* Responsible for developing and maintaining online documentation and resources pertaining to wireless network
- \* Practice network asset management, including maintenance of network component inventory and related documentation and technical specifications information.
- \* Interfaced with customers and senior management for problem resolution and project planning.
- \* Ensure network connectivity of all servers, workstations, telephony equipment, fax machines, and other network appliances
- \* Create and maintain documentation and Visio diagrams as it relates to network configuration, network mapping, processes, and service records.
- \* Used Panorama management tool in the threat prevention for the Palo Alto Firewall.
- \* Used REDHAT for the administration purpose.
- \* Oversee new and existing equipment, hardware, and software upgrades.

# **Network Specialist**

Atos - Hightstown, NJ - January 2012 to November 2012

- \* Analyzed corporate LAN and WAN to determine the major problems and improvements needed to be made to the network infrastructure, as per the client requirements for network design, configuration, implementation and troubleshoot the network.
- \* Involved in troubleshooting LAN connectivity, hardware issues in the network, IP addressing issues, created a backup and recovery policy for software application, verified the working of peripherals and Updating IOS images using TFTP.
- \* Set up and troubleshoot 802.11 wireless networks.
- \* Working on configuring routing protocols (OSPF, BGP4, RIP, IGRP and EIGRP) and enterprise class switches-router management (Cisco 6509, 2800, 2900, 3750, 3800, 3900).
- \* Worked on supporting a wide variety of networking components including Cisco Routers, Switches, Wireless Access Points, MPLS, Frame-Relay, ATM, ISDN, BGP, EIGRP, OSPF and RIPv2.
- \* Worked on F5 BIG-IP LTM, configured profiles provided and ensured high availability.
- \* Monitored network and servers to identify potential problems and bottleneck and troubleshoot to provide high performance.
- \* Interacted with support services to reduce the downtime on leased lines.
- \* Managed the IP address space using subnets and variable length subnet masks (VLSM) and Monitored the operability and reliability of the network.
- \* Daily responsibilities included monitoring remote site using network management tools, assisted in design guidance for infrastructure upgrade & help LAN administrator with backbone connection and connectivity issues.
- \* Modified and tested scripts and extended Linux system functionality as needed.
- \* Other responsibilities included researching and documenting the new monitoring solutions in the market which would suit the company needs.

## **Network Engineer**

Qualcomm - June 2008 to December 2011

- \* Installed and supported LANs, WANs, network segments, and Internet, and also maintained network hardware such as Cisco routers 2600 series, 2800 series, 3600 series, 3800 series and Cisco switches
- \* Configuration and troubleshooting issues related to access lists and DNS/DHCP issues within the LAN network.
- \* Worked with senior network engineers for multiple site Upgrades for data and VOIP equipment's and also in re-configuring the new device and making sure projects are done under defined project timelines.
- \* Monitored networks to ensure security and availability to specific users and modified system's performance based on the network and system requirements and to maintain integrity of the network, server deployment, and security.
- \* Maintained and provided Level 2 and Level 3 technical supports for all network related issues and providing the requirements of the customer by interacting with the customer on daily basis via email and phone.
- \* Created a detailed design drawing of the sites, which are under up-gradation and getting it validate from the technical design team and maintained the remote site network, consisting of QoS design, IP addressing, Visio Drawings.
- \* Responsibilities included Creating Lab demonstrations for new technology deployments with loaner equipment from various vendors and presented the findings to upper management.
- \* Other responsibilities included monitoring and managing servers, desktop computers, printers, routers, switches, phones, and security updates.

## **SKILLS**

CISCO (9 years), SECURITY (8 years), DHCP (6 years), DNS (6 years), ACCESS (4 years)

#### ADDITIONAL INFORMATION

# TECHNICAL SKILLS:

Protocols RIP, RIP V2, EIGRP, OSPF, IS-IS, IGRP, HSRP, VRRP, GLBP, LACP, PAGP, DNS, SMTP, SNMP, FTP, TFTP, LPD/TDP, WLAN, [...] WEP, POP3 LADP, TNS.

LAN Technologies Workgroup, Domain, HSRP, DHCP, Static, VLAN, STP, VTP, Ether Channel, Trunks. WAN Technologies Leased Line, Frame Relay, ISDN, PPP, HDLC, ATM, SONET, Metro Ethernet. Network Products

CISCO Routers 1700, 1800, 2500, 2600, 2800. CISCO High End Router 3600, 3800, 7200, 12010. CISCO Switches 1900, 2950, 2960. CISCO Campus Switches 3550XL, 4984 Core Catalyst 4503, 4507 RE, Catalyst [...]

## Security & VPN

PIX 500 Firewall, ASA 5505 Firewall, AIP SSM, CSC SSM, FWSM, Fortigate, CISCO CSM, ACL- Access Control List, IPS/IDS, NAT, PAT, CISCO ACS, Check point, SonicWALL, RSA Secure ID, SRX, SSG series firewalls.

Authentication RADIUS, TACACS+, Digital certificates

Monitoring Tools Wireshark, Nmap, Nessus, OpManager, PRTG Packet Sniffer Servers

Domain servers, DNS servers, WINS servers, Mail servers, Proxy Servers, Print Servers, Application servers, FTP servers, Avocent Console server.

#### **Operating Systems**

Windows NT 4.0 (Desktop/Server), Windows [...] server, Windows XP/7, LINUX, Solaris, Red Hat, Active Directory, UNIX, junos.

Languages C, C++, .Net, Java, J2EE, XML, SQL Scripting Language HTML, Java Script, CSS, Python.

# Certified courses

- \* Cisco Certified Network Associate (CCNA)
- \* Cisco Certified Network Professional (CCNP)