# sumanth k

# Network Security Engineer - Becton, Dickinson and company

Cary, NC - Email me on Indeed: indeed.com/r/sumanth-k/7040b17ac65a06ad

- Sr. Network Engineer with 8years of IT experience with a focus on designing and developing network & security solutions.
- Strong knowledge based in the planning, design, and implementation of Information Systems and Network Technologies.
- Experience on layer 3 routing and layer 2 switching.
- Experienced in design, installation, configuration, administration and troubleshooting of LAN/WAN infrastructure and security using Cisco routers/Switches/firewalls.
- Experience in Cisco Nexus 1k,2k, 5k, 7k & 9k Series, Cisco Catalyst Switch 6500, Cisco Routers 3900
- Experience on Juniper Jun OS using SRX, MX, EX series Routers/switches/Firewalls
- Enterprise Routing experience using protocols RIP v1 & 2, EIGRP, OSPF and BGP.
- Enterprise Switching with VLANs, Trunks, Spanning Tree, Port Spanning etc.
- Switching tasks include VTP, ISL/ 802.1q, IPsec and GRE Tunneling, VLANs, Ether Channel, Trucking, Port Security, STP and RSTP.
- In depth understanding of IPV4 and implementation of Sub netting.
- Strong Proficiency in SMB POP IGMP SMTP and TCP/IP protocols
- Experience in configuring Site-to-site and remote access VPN solutions.
- Serve as lead on configuration and troubleshooting VPN's on all vendor firewall devices.
- Experienced in handling and installing Palo Alto Firewalls and juniper SRX firewall.
- Network security including NAT/PAT, ACL, VPN Concentrator, IDS/IPS, and ASA/PIX Firewalls.
- Experience with convert PIX rules over to the Cisco ASA solution.
- Strong hands on experience on PIX Firewalls, ASA [...] Firewalls. Implemented Security Policies using ACL, Firewall, IPSEC, SSL, VPN, IPS/IDS, AAA (TACACS+ & RADIUS)
- 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 Checkpoint Firewall in IPSO, Secure Platform and GAIA platforms.
- Configure ISE 2.1 TC-NAC with AMP and Posture Service and device Sensor for ISE Profiling.
- Firewall technologies including general configuration, risk analysis, security policy, rules creation and modification of checkpoint firewall R70, R75 Provider-1/Site Manager-1.
- Experience with cisco ASR [...] / CRS-3/ NCS 6k for providing in-depth support and consulting services.
- In depth knowledge of MPLS (VPLS, VPWS, L2VPN, L3VPN), LDP, RSVP, IS-IS, OSPF, MP-BGP, VRFs and Multicasting.
- Experience with Cisco IP Telephony, CUCM (4.X-7.X), Gatekeepers, Voice Gateways, Cisco Unity Connection, CME, Cisco Presence
- Deployed Voice over IP Solution for various customers, each with distinct requirements including but not limited to Cisco Communications Manager centralized cluster with remote sites running SRST functionality.
- Experience with F5 load balancers LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability.
- · Manage deployment and testing of code updates for wireless systems, such as WCS, WISM and WLC
- Familiar with 802.11 a/b/g and 802.1 Q standards and RF technology
- · Experienced in troubleshooting various network related problems by using sniffing tools
- Experience on Monitoring tools like Wireshark, Solar winds, TCP Dump, Nagios, Open NMS, PRTG, Remedy, Op Net, VMware, Riverbed, SNMPv2, SNMPv3
- Assisted with scheduling, troubleshooting, and modification of TelePresence meetings through proprietary Cisco systems, as well as using third-party systems (Microsoft Outlook, etc.)

- Learned to diagnose and troubleshoot TelePresence endpoints (CTS, MX, SX, EX, TX)
- Experience in designing data communications and networks utilizing that utilize a mixture of frame relay,
- A highly organized individual, who adopts a systematic approach to problem solving, effectively analyzes results and implements solutions.

# Routing and switching Protocols

RIP, RIP2, PPP, OSPF, EIGRP, IS-IS, BGP, H323, SIP, MGCP, SCCP, SNMP, HTTP, FTP, TFTP, HTTP, DHCP, SMTP, ICMP

VLAN, VTP, STP, PVST+, RPVST+, Inter VLAN routing &Multi-Layer Switching, Multicast operations, Layer 3 Switches, Ether channels.

# Firewalls and Sniffers:

Cisco PIX, FWSM, ASA, Palo Alto PA-500, PA-2k, PA-3k, PA-5k & PA-7050, Checkpoint [...] SRX210, SRX240OPNET, WIRESHARK, Solar winds, TCP dump, VMware, Nagios, SNMPv2, SNMPv3

WAN Protocols and Technologies MPLS, HDLC, PPP, ATM, FRAME RELAY, IDSN, Metro Ethernet IPsec, GRE, NAT/PAT, ACL, IPv4, IPv6

Routers Cisco 7609, 2600, 2800, 3800, 3640, Cisco 3745, 7200 Series, ASR 9000, CRS-1, CRS-3, Juniper: EX-2200, EX-4200, EX-4500, MX-480, M Series

Switches Cisco 3500, 5000, 6500 Catalyst Series Cisco 7000, 2000 Nexus Series

Network Equipment

CISCO [...] series Switches, CISCO 800, 1600, 2500, [...] series Routers, Cisco wireless access points.

Operating System Windows XP/7/8, UNIX, Linux

Willing to relocate: Anywhere

Authorized to work in the US for any employer

#### WORK EXPERIENCE

# **Network Security Engineer**

Becton, Dickinson and company - Cary, NC - October 2016 to Present

#### Responsibilities:

- Design, deployment and maintenance of enterprise networks and datacenters.
- Deploy ISE technology in infrastructure to establish secure and authenticated network.
- Worked on multiple projects related to Branch networks, Campus networks, extranet clients and Data Center Environments involving in data center migrations from one data center to another.
- Develop test plans, implementation plans, and project timelines for various assignments.
- Responsible for the deployment, configuration and maintenance of a Cisco Identity Service Engine(ISE) infrastructure to include Policy Admin, Monitoring and Policy Services Nodes with over 50K endpoints.
- Implemented 802.1x standards for the end user network using CISCO ISE (Identity Service Engine)
- Implement and maintain the network performance and health of the corporate network.
- Responsible for providing secure access to wired/wireless end users and guests.
- Investigate and resolve wired & wireless network issues, research analyze, isolate and resolve errors, assess and evaluate current and future systems.
- Configuring and integrating Network Access Devices(NAD), profiles and polices on Cisco ISE.
- Worked on Cisco AnyConnect client mobility (4.4) for enabling Modules Network Access Manager(NAM) and posturing.
- Upgraded the remote access (VPN) and Firewall environment for the entire organization

- Configuration and maintenance of an infrastructure to include Cisco Wireless controllers, Switches, Aps and Radius authentication.
- Writing API script for Integrating 3rd party Amilea 3rd party cloud service for Guest Access and getting authenticated with Cisco ISE.
- Experience in migrating Check point to the Cisco ASA Devices. Also, migrating from Cisco to Palo Alto.
- Develop and maintain technical documentation (design specs, architecture, configuration diagrams, standard operating procedures, processes, standards, site reference etc.)
- Responsibilities also include technical documentation of all upgrades done. Attending meetings and technical discussions related to current project.
- Write functional requirements/specifications documents.
- Perform network troubleshooting to isolate and diagnose common network Problems.

Environment: Cisco ISE, Cisco routers (7200, 3800, 2800) and Cisco switches (6500, 3700, 4900, 2900), Nexus (7K, 5K & 2K) Routing Protocols (EIGRP, OSPF, BGP), Switching protocols (VTP, STP, GLBP, HSRP), Cisco PIX (525, 535), ASA (5505, 5510) firewall.

# Sr. Network Engineer

Pfizer - Chicago, IL - March 2015 to August 2016

#### Responsibilities:

- Experience working with market data networks and dealing with clients and deploying network designs
- Experience with converting WAN routing from EIGRP/OSPF to BGP which also involved converting from Point to point circuits to MPLS circuits.
- 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
- Experience with design and configuring Overlay Transport Virtualization (OTV) on Cisco NX-OS devices like Nexus 7000
- Experience working with High performance data center switch like nexus 7000 series
- Experience working with Nexus 7010, 7018, 5020, 2148, 2248 devices.
- Experience configuring VPC, VDC and ISSU software upgrade in Nexus 7010
- Experience in Configuring, upgrading and verifying NX-OS operation system with OSPF, BGP
- Experience with convert PIX rules over to the Cisco ASA solution.
- · Responsible for Cisco ASA firewall administration across our global networks
- Design and configuring of OSPF, BGP on Juniper Routers (MX960) and SRX Firewalls(SRX240)
- Key contributions include troubleshooting of complex LAN/WAN infrastructure that include routing protocols EIGRP, OSPF & BGP
- Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASA 5500 with ACL, NAT, Object Groups, Failover, Multi-Contexts
- Deployed Voice over IP Solution for various customers, each with distinct requirements including but not limited to Cisco Communications Manager centralized cluster with remote sites running SRST functionality
- Integrated the Cisco Unified Wireless IP Phones (792X series) with Cisco Unified Communications Manager and Cisco Unified Communications Manager Express using IEEE 802.11 over a Cisco access point.
- Experience with video Encoder/Decoder configuration
- Experience with compressed and uncompressed digital video and audio standards, especially around H.264 and MPEG-2 technologies
- Experience with web streaming platforms (Adobe, Microsoft)
- · Configure, administer, and document firewall infrastructure, working with Checkpoint/Nokia.
- Manage the firewall deployment, rules migrations, and firewall administration.

- Responsible for converting existing rule base onto new platforms.
- Thoroughly familiar with Checkpoint models, capabilities, and architectures
- · Managed corporate Checkpoint Firewalls Implementing security rules and mitigating network attacks
- Daily responsibilities included design, implementation, support and administration of multiple security products running Checkpoint Provider-1 and VSX, Source Fire, and ISS Real secure.
- Deployed Site to Site and Client to Site VPNs utilizing checkpoint Firewalls-1/VPN-1
- Fully versed in the syntax of security platforms, and rule verification
- Managed the F5 Big-IP GTM/LTM/AFM appliances to include writing I Rules, SSL offload and everyday task of creating WIP and VIPs
- Involved in migrating applications from net scalars to F5 Big -IP environment
- Developed deployment solutions for network technologies including Optical VoIP VPN SAN switching and routing.
- Responsible for layer 2 securities which was implemented using a dedicated VLAN ID for all trunk ports, setting the user ports to non-trucking, deployed port security when possible for user ports
- Enabled STP attack mitigation (BPDU Guard, Root Guard), using MD5 authentication for VTP, disabling all unused ports and putting them in unused VLAN
- Implemented Site-to-Site VPNs over the internet utilizing 3DES, AES/AES-256 with ASA Firewalls
- Implemented antivirus and web filtering on Juniper SRX 240 at the web server as well as configuration of F5 Big-IP LTM-6400 load balancers and experience working with F5 technologies (LTM, GTM, APM, V9, V10, V11)
- Responsible for managing activities, Upgrading IOS Upgrading hardware and installing new devices, tuning (Configuration), make standardization for the topology
- Configured, installed, &managed DHCP, DNS, & WINS servers
- 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
- Provide front end on-call network support 24x7x365 for all network infrastructures in the co-operation

Environment: Cisco routers (7200, 3800, 2800) and Cisco switches (6500, 3700, 4900, 2900), Nexus (7K, 5K & 2K) Routing Protocols (EIGRP, OSPF, BGP), Switching protocols (VTP, STP, GLBP, HSRP), Cisco PIX (525, 535), ASA (5505, 5510) firewall.

# **Network Engineer/Security**

TD Bank - Farmington Hills, MI - October 2013 to February 2015

#### Responsibilities

- Design, and configuring of OSPF, BGP on Juniper Routers and SRX Firewalls.
- Configuring IP, RIP, EIGRP, OSPF and BGP in routers.
- Configuring RIP, OSPF and Static routing on Juniper M and MX series Routers
- Configuring VLAN, Spanning tree, VSTP, SNMP on EX series switches
- Configuring IPSEC VPN on SRX series firewalls
- 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.
- Switching related tasks included implementing VLANS, VTP, STP and configuring on Fast Ethernet
- VLAN Configurations, troubleshooting and Firewall ACLs and Object-Groups configuration and support
- Designed, configured, implemented and supported VoIP Installations.
- Provisioned and troubleshoot HLR, VLR, SGSN/GGSN registrations, and IP address assignment, DHCP services, Domestic/Roaming GSM/GPRS, Wi-Fi, Voice Mail and features.
- Commissioned wireless voice and data, IP services, Access Point Names (APN), PAPN, security, and GPRS PDP context activation, VPN for medium too large-sized corporate and individual customer.
- Gained through understanding of call center environment including call routing algorithms in ACD system.

- Installed and maintained routers and switches in various network configuration supported VLANs, Qos, VoIP and advanced Access-Lists.
- Experience in deploying EIGRP/BGP redistribution and the changing the metrics for the primary and backup
- Configuring rules and Maintaining Palo Alto Firewalls & Analysis of firewall logs using various tools.
- Successfully installed Palo Alto PA-3060 firewalls to protect Data Center and provided L3 support for routers/ switches/firewalls
- Responsible for setting up the infrastructure environment with majority of Cisco & Palo Alto appliances apart from various other equipment.
- Palo Alto design and installation (Application and URL filtering, Threat Prevention, Data Filtering).
- Configured and maintained IPSEC and SSL VPN's on Palo Alto Firewalls.
- Experience on a mesh 6500 and 5500 series routes and switches to support the core trading system.
- Experience in designing data communications and networks utilizing that utilize a mixture of frame relay.
- Experience on Cisco ASR 9000, CRS-1/3 for providing Depth support and services.
- In depth knowledge of cisco ASR 9k, MPLS, IS-IS, OSPF, MP-BGP, VRFs and Multicasting.
- In depth knowledge of MPLS control plane protocols (LDP, RSVP, CSPF)
- Experience on Multicast in a campus network by using IGMP and CGMP on Catalyst switches
- Experience converting Cat OS to Cisco IOS on the Cisco 6500 switches
- Configured IGMP snooping on catalyst 5000 and 6000 switches.
- Installation, Configuration and Administration of ADS, DNS, DHCP and Web proxy(ISA)server
- · Worked on HSRP for load balancing.
- Managed the F5 Big IP GTM/LTM/AFM appliances to include writing I Rules, SSL offload and everyday task of creating WIP and VIPs
- Maintenance of F5 Load Balancers-6600/6800
- Working on the project of F5 LTM and GTM code upgrade project, doing couple of them every week.
- Implementing and configuring F5 LTM's for VIP's and Virtual servers as per application and business requirements
- Worked on info lox, which is a public developer and provider of enterprise network.
- Info lox for Network landscapes for security, virtualization, cloud, SDN.
- Bluecoat proxy server's setup, configuration, upgrade and Troubleshooting
- Manage Cisco Routers and troubleshoot layer1, layer2 and layer3 technologies for customer escalations
- Managed corporate Checkpoint Firewall implementing security rules and mitigating network attacks.
- Deployed Site to Site and Client to Site VPNs utilizing Checkpoint Firewall-1/VPN-1
- Migrated previous corporate Checkpoint 4.0 Firewall-1/VPN-1 on Windows NT to Nokia IPSO appliance for increased performance and stability
- Taking Regular backups & testing the backups by restoring in test lab frequently
- Configured IPsec site-to-site VPN connection between Cisco VPN 3000 Concentrator and Cisco 3800
- Managing a TACACS server for VPN user authentication and network devices authentication
- Troubleshooting and installing of CRS, ISR, GSR, ASR9000 and Nexus devices.
- Upgrade Cisco Routers, Switches and Firewall (PIX) IOS using TFTP
- Monitored all Cisco equipment's using Cisco Works
- Installed and configured the Cisco routers 2800 in two different customer locations. It includes coordinating with Verizon and AT&T in order to bring the serial interface up for T3 link. Also, configuration includes frame relay, BGP and VPN tunnel on GRE

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, Ether Channels.

# **Network Engineer**

UPS - Ramsey, NJ - March 2012 to September 2013

### Responsibilities:

- Configured Cisco Routers for OSPF, RIPv2, EIGRP, BGP, Static and default route.
- Experience in Cisco switches and routers: Physical cabling, IP addressing, Wide Area Network configurations.
- Responsible for Internal and external accounts and, managing LAN/WAN and checking for Security
- Switching related tasks included implementing VLANS and configuring ISL trunk on Fast-Ethernet and Gigabit Ethernet channel between switches.
- Set up VLANs and access ports connecting virtual machines using the NX-OS CLI on Cisco Nexus 1000v virtual machine and VMWare vSphere client networking.
- Worked on ASA (5540/5550) Firewalls and juniper SRX firewall. Implemented Security Policies using ACL, Firewall, IPSEC, SSL, VPN, IPS/IDS, AAA (TACACS+ & RADIUS)
- Designed ACLs, VLANs, troubleshooting IP addressing issues and taking back up of the configurations on switches and routers.
- Configured, Installed, tested and installed Cisco's enterprise telecommunications system
- Installed and maintained VoIP infrastructure components
- Worked on HSRP for hop redundancy and load balancing.
- Provided port binding, port security and router redundancy through HSRP.
- Configured the Cisco router as IP Firewall and for NAT Configured RSTP, MST and used VTP with 802.1q trunk encapsulation.
- Designing and installing Wireless Network Infrastructure.
- Performing regular maintenance of wireless network systems like periodic system testing and software upgrades
- Assisted university campus for VOIP network management and troubleshoot
- Implementation of name resolution using WINS & DNS in TCP/IP environment
- Configured FTP server for inside/outside users & vendors
- Worked on F5 LTM, GTM series like 6400, 6800, 8800 for the corporate applications and their availability.

Environment: Cisco 7200/3845/3600/2800 routers, TACACS, EIGRP, RIP, Vulnerability Assessment tools like Nessus, Red Hat, Solaris, Juniper VPN's, SSL.

#### **Network Engineer**

Dilytic - Hyderabad, ANDHRA PRADESH, IN - December 2010 to February 2012

# Responsibilities:

- Configured Routing protocols such as OSPF and policy based routing.
- Create and test Cisco router and switching operations using OSPF routing protocol.
- Configuration and troubleshooting link state protocols like OSPF in multiple areas.
- Configuration 7609, 7606 with OSPF and catalyst 6505, 4500, 3550 switches with various VLAN.
- Configured HSRP and VLAN trucking 802.1Q, VLAN Routing on Catalyst 6500 switches.
- Optimized performance of the WAN network consisting of Cisco 3550/4500/6500 switches by configuring VLANs.
- Configured VLANs with 802.1q tagging. Configured Trunk groups, ether channels, and Spanning tree for creating Access/distribution and core layer switching architecture.
- Team member of Configuration of Cisco 7206 router and Configuration of Catalyst switches.
- Configured BPDU Guard, port-fast, uplink fast and other spanning tree features.
- Configuration and troubleshooting of Cisco 2500, 2600, 3000, 6500, 7500, 7200 Series routers.
- Configured IP access filter policies.
- Providing Technical Support and solutions for Network Problems.
- Involved in migration of ACE 10 and ACE 20 to ACE 30 module
- Implementing NAT solution's on Cisco IOS routers.

- Worked on Cisco Routers, Active /Passive Hubs, Switches.
- Having Data Center Design Experience, installing and Configuring Network Devices in a Data Center including patching the cables in the Patch Panel.
- Design and implemented network infrastructure and configured all the network Infrastructure devices including Network Printers and Registers

Environment: CISCO routers and switches, Access Control Server, VLAN, Trunk Protocols, CISCO ASA, DHCP, DNS, Spanning tree, Nimsoft.

# **Network Support Executive**

Etisbew Technology Group - Hyderabad, ANDHRA PRADESH, IN - April 2008 to November 2010

### Responsibilities:

- Network Assessment and Documentation (including technical, operational, and economic assessment)
- Provided hardware and software support to corporate users and IT staff
- Provided technical support on hardware and software to remote production sites
- Help negotiate hardware, software, and circuit contracts for customers
- Configure and implement Remote Access Solution: VPN, ISDN dial up, Fractional T1
- Configure Cisco VPN 3000 Concentrator to allow VPN clients
- Redistribution of routing protocols and Frame-Relay configuration
- Troubleshoot Windows 2000 Servers and streamlining the user policy.
- Managing User accounts using Active Directory
- Implementation of TCP/IP & related Services-DHCP/DNS/WINS
- Maintained Local Area Network connectivity including switches, routers, wiring closets, and drops to the desktops
- Managing Layer 2 switches of Cisco, V Lan configuration and assigning ports to specific V Lan as per requirement
- · Configured standard and extended access-lists on network
- Implement Cisco IOS Firewall IDS using 2600 series router

# **EDUCATION**

# bachelor's degree in Information Technology in Information Technology JNTU

# **SKILLS**

Cisco PIX (8 years), Palo (8 years), Alto (8 years), PA-500 (8 years), PA-5k (7 years), VMware (8 years), Nagios (8 years), MPLS (7 years), HDLC (7 years), ATM (7 years), IDSN, MGCP, RIP (8 years), PPP (8 years), H323 (8 years), SCCP (8 years), HTTP (7 years), TFTP (7 years), Cisco 7609 (7 years), Cisco 3745 (8 years), ASR 9000 (7 years)