**SUMANTH N sumanth0513@gmail.com | 318-598-1817**

# PROFESSIONAL SUMMARY

* **Cisco Certified Network Associate and Professional in Routing and Switching (CCNA) &(CCNP*)* andCertified Meraki Network Operator (CMNO*)*and Fortinet Network Security Associate**with proven experience in network deployments, troubleshooting, implementation and design.
* Has eight years of information technology experience including two years of AWS cloud network infrastructure
* Able to conduct research in networking products and hands on troubleshooting experience
* Possesses excellent problem solving and communication skills
* Provided TCP/IP Wide Area Network Design, implementation, installation, maintenance and support experience includes full technical supporting **network infrastructure and virtualized network infrastructure and Cloud network infrastructure**
* Broad knowledge and experience in TCP/IP, Networking Devices, Network Security (Firewalls, IPS/IDS), Routing Protocols (OSPF, IGRP, EIGRP, BGP and RIP), Cisco NX-OS and IOS and LAN/WAN/MAN technologies including Ethernet, experience in Cisco wireless and Cisco Meraki wireless and AWS infrastructure like Peering connections, EC2, VPC, Elastic load balancing, Direct connect (DXG), Security Groups, VPC flow logs

# TECHNICAL SKILLS

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| **Routing** | RIP, EIGRP, OSPF, BGP, Route Filtering, Route Redistribution, Summarization, and Route Maps, Prefix lists,Static Routing, FHRP, HSRP |
| **Switching** | VLANs, VTP, STP, PVST+, RPVST+, Inter VLAN routing & Multi-Layer Switch, Ether channels, Transparent Bridging, Port Security, VSS, VPCand VDC, VPC+, APIC, VXLAN |
| **Routers** | 2900, 3800, 4321,4451, ASR-901, ASR-903, ASR1000, ASR9000 |
| **Switches** | Cisco Catalyst 6500, 4500, 3850, 3750, 3560, 2960, Nexus 9000,7000, 5000,2000 |
| **WAN Technologies** | HDLC, PPP, MPLS,VPN, SD-WAN |
| **NetworkManagemet** | Wire shark, SNMP, Ethereal, Solar winds, Cisco NAC, ISE, Cisco Meraki, Cisco works |
| **Security** | Fortigate, Security Groups, Checkpoint, Access Control Lists, Cisco ASA, MacAfee proxy servers, Cisco Firepower |
| **Virtualization** | vMotion, ESXi hosts, vSphere, Vcenter |
| **Load Balancer** | F5 , Elastic Load Balancing |
| **Operating Systems** | MS Windows XP/Vista/Windows 7/8/10, Sun Solaris, Server Linux |
| **Applications** | Cisco Prime,Infoblox, HP open view and MS Visio, Bluecoat, |

# PROFESSIONAL EXPERIENCE

## Common Securitization Solutions, Pasadena, CA Oct 2017-Present

## Network Security & Infrastructure Engineer

* Responsible for Building/Deploying the CSS Pasadena Campus network infrastructure from the grounds up, using Fortigate Firewalls, Cisco Meraki Switches, Cisco Meraki Wireless, Shortel SD-Switch for VOIP
* Experience in building Layer 2 and Layer 3 networks, Wireless infrastructure, Firewall polices to integrate with Amazon AWS Cloud Infrastructure
* Working on Fortigate Firewall configurations, management and operations
* Hands on experience configuring the Nexus 9000 switches with feature-set like vPC, VDC
* Experience in Troubleshooting the User connectivity between different AWS VPC’S that are originated from EC2 instances
* Configuring the direct connect connections (DXG) from our data center to AWS data center and configure the virtual interfaces for the VPC
* Configuring the Peering connections between the VPC’S in the same region and inter region
* Strong working knowledge of network/internet Protocols/Services such as BGP, EIGRP, OSPF
* Experience in building the BGP between the Fortigate Firewalls and ISP’s edge networks
* Experience in configuring IBGP and EBGP and had knowledge in understanding neighborship requirements and neighbor states, Had in-depth knowledge on the BGP path attributes like Weight, Local preference, Origin code, AS path and MED
* Redistribution of routing protocols, Route maps (Police based routing), ACL, NAT
* Coordinates with ISP’S for break/fix, Installation and moves/adds/changes of Internet connectivity
* Responsible for building the IPSEC tunnels between the Remote office and Corporate headquarters, Datacenters, Partner connections like Fannie Mae and Freddie Mac
* Manage and configure Cisco routers ASR – 1001 X, ISR-4451, Cisco switches 2960, 3850, 4000, Fortigate firewall 37D, 1000C, 3980, Fortigate VM-64 FW‘s is hosted in the AWS and Nexus 9000 (NX-OS MODE) devices in the data center
* Experience in configuring the Cisco Meraki wireless (MR-53) and Cisco Meraki Switch (MS-250-24P for terminating the ISP’s connection, MS-350 24X (Multi-gig Switch) for the Wireless and Security cameras configurations, MS-350 48FP for the user switches to be managed from the Cloud based Meraki Dashboard.
* Completed a Firmware upgrade on Cisco Meraki Switches to latest version of MS 9.37 and Cisco Meraki Access points to latest version of 25.11
* Working on F5 – Load balancer, configuring Local Traffic Manager (LTM), Global Traffic manager (GTM), APM (Application Policy Manager)
* Created pools for the nodes and assigned **Virtual IP’s** to those pools on F5 load balancers
* Implemented least connections algorithm for the **LTM**, **GTM**and defined the persistence
* F5 APM implementation done for SAML SSO
* Responsible for Maintaining Cisco Meraki Access points for the Internal users and guest users access and troubleshooting the Wireless issues like DFS (Dynamic Frequency selection)
* Configure a shortel IP-485 phones for the users in the office
* Configuring Shortel Phones with Daisy chain to user laptops by configuring the Network Policy Server
* Involved in troubleshooting of DHCP and other IP conflict problems
* Performed identification of connectivity issues using PING, Trace route and packet capturing tools like Wireshark Monitored health of network gear using solar winds
* Troubleshoot network related issues, document network changes, recommend and implement configurations changes, participate in project calls
* I was a part of the Network Operations team that performed standard network operations via ITIL standard with Incident Management and Change management for network devices

**Amdocs, Richardson, Texas           Jan 2015 –Sept 2017**

**Network Engineer**

**Nexus experience includes**

* Currently Data centers are interconnected with OTV, was a part of the team that architects the plan with every minute details taken into consideration with minimal downtimes, Installed transport services package on the new and old new gear for OTV feature
* Brought up the connections between existing and new environments in both data centers. Extended all Vlan’s to facilitate connectivity into the new environment with OTV as interconnects. Tested and verified connectivity
* Worked on OTC to extend L2 VLANs between datacenters using Nexus7K platform, configured and deployed Vpc between N7710 and N5K platform.

**Layer-3 experience includes**

* Configured EIGRP on different router series and troubleshooting the issues with protocol in case of any misconfiguration like variance to increase the convergence speed
* Experience in configuring IBGP and EBGP and had knowledge in understanding neighborship requirements and neighbor states, Had in-depth knowledge on the BGP path attributes like Weight, Local preference, Origin code, AS path and MED
* Spearheaded meetings & discussions with team members regarding network optimization and regarding BGP issues. If needed, we advertise those networks in BGP with our ISP. We make sure that routes are protected via VRFs. We make use of route maps for manipulating the paths to our ISP and that also helps to load balance traffic to both ISPs
* Involved in troubleshooting of link flaps, failure to form neighborship with adjacent routers on our core ASR 1001-x series routers
* We peer into our ISP core router with an AT&T service provider router (ASR 1001-X) advertising all our necessary routes to it and getting a default route from our ISP to our core router for entire global Internet
* Responsible for designing and maintaining EIGRP, BGP and Wan Protocols for Network Infrastructure. Also made sure that WAN utilization is optimized by using features like steelhead and riverbed technology
* Designed dual DMVPN cloud deployment utilizing new OC-3 circuits, Administered and implemented Cisco routers in Cisco IWAN environment creatingDMVPN tunnels connecting over 150 sites

**Multilayer switch experience includes**

* Worked on configuring Ether channels and troubleshooting using misconfiguration guard if the remote end of ether channel is misconfigured
* Successfully upgraded Cat 6509-E from Sup2t to Sup 6T-XL with Quad-VSS on it
* Configured and upgraded networking devices, including switches and routers, with the help of python scripting.
* Configured STP for switching loop prevention and VLANs for data and voice along with configuring port security for users connecting to the switches (RSTP, PVST+)
* Performed IOS upgrade according to the recommendation by the Cisco TAC, hosted multi-tenant Any connect/SSL VPN implementation.
* Configuring user's roles and policies for authentication using Cisco NAC and monitoring the status of logged users in network using Cisco ISE.
* Implemented VPN security posture assessment for high profile users integrating Cisco Any Connect VPN and Cisco ISE.
* Develop and implement Cisco ISE solution to replace aging TACACS+ authentication servers
* Created a new solution including new construction and installation of a full mesh, wireless and wired network with a full ISE installation, Identifying endpoints missing from ISE and determine reason for omission and we upgraded from version 1.3 to 2.1
* Configured Cisco wireless controllers and access points for enterprise network, including setting up SSIDs and WLANs on WLC’s like 5508 and 5760, Wireless maintenance and troubleshooting to include LWAPP and IOS-based access points Cisco Prime to manage wireless controllers
* Assist and troubleshoot Cisco Meraki solutions remotely including 802.11a/b/g/n/ac Wireless networks, Stateful firewall, VLAN to VLAN routing, Link bonding / failover, 3G / 4G failover, Traffic shaping / prioritization, WAN
* Created A records, PTR records & MX records as requested by the customers as per their DHCP settings on Infoblox
* Monitored and troubleshot all routing, VPN and security issues with Solar winds. Installed and configured Solar winds Orion for company WAN/LAN.
* Constantly monitored Solar winds NPM activity to ensure optimum uptime and performance in a proactive manner
* Installation, Configuration and Administration of Solar Winds Orion Product suite
* Resolve communication issues between network nodes and Solar winds Orion poolers via net flow and SNMP configurations. Set up Solar winds dependencies for alert suppression of downstream nodes in case of site outage
* Performed security operations by adding rules in firewalls and pushing firewall policy as per the incidents and rule requests from users
* Have experience in configuring the Identity Awareness (IA) cluster, which is a new feature from checkpoint for granting access to end users not only based on IP addresses but also using the AD groups that they are in which will be in sync with DC’s
* Tuned policies on IPS to make changes accordingly on the vulnerabilities and change to detect, prevent modes as required, Signature Updates Deployment on the Management Components and all the Individual IPS/IDS devices.
* Configuring VPN, clustering and ISP redundancy in Checkpoint firewall.
* Conducted security policy/rule review to identify and remove rules that are not needed to reduce checkpoint firewall policy lookup.
* Analyze logs in smart view tracker to troubleshoot network traffics. Checkpoint Management server HA for fail-over for network management reliability.
* Configured VMware clusters, VMFS, VLAN's, P2V, vMotion and data stores for projects/VMs that were being on boarded to VMware environment, Deployment of VM's from OVF/OVA templates
* Designed, built, installed, and tested Windows 2008 R2 & 2012, Linux Ubuntu, and VMware ESXi servers based on requirements from customer and established standards.
* Installed and administered Windows 2003 and server based applications - including user administration within Active Directory and MS Exchange 2003 and perform and monitor backups of SAN, NAS, and server systems using Backup Exec.
* Worked with BIG-IP Access Policy Manager (APM) contextually secures, simplifies, and protects user access to apps and data, while delivering the most scalable access gateway
* Implemented load balancing methods, SSL certs, persistence profiles, SNAT IPs, client/server profiles while configuring VIPs and customizing them as per the application needs

**NRG Energy, New Jersey                        Oct 2013 – Dec 2014**

**Network Engineer**

**Nexus responsibilities includes**

* Working in high availability Nexus Environment and provide Level 3 Network Support
* Design and implementation of a multi-site backup utilizing Cisco Nexus Fabric path
* Worked on the Fabric path to extend L2 VLANs between data centers over mac in mac on Nexus 7710 switches, Configured and deployed VPC and VRF between Nexus 7710 and Nexus 56128p, 5596 switches
* In the process of migrating the end hosts such as ESXi hosts, physical servers onto Fabric path. Connectivity between the end host and leaf switch is conventional Ethernet but the Border leaf, Spines are connected via. The Fabric path interface which eliminates STP between the fabric path interfaces
* Configured and maintained VDCs in the 7710 switches, maintained VRFs in those separate VDCs.
* Responsible for Global data center migration from Cisco Catalyst devices to a full Nexus infrastructure utilizing Nexus 7000 series switches
* Working with Cisco Nexus 2148t Fabric Extender and Nexus 5500 series to provide a Flexible Access Solution for data center access architecture
* Exposure to Nexus, Hardware Architecture of the Sups, chassis, I/O Modules, Fabrics, Licensing, VDC, VPC, ISSU, using NXOS CLI, resolve remedy incidents related to Cisco Nexus 7K, 5K, 2K devices alerted in Solar winds

**Layer-3 responsibilities includes**

* Worked onthe stub areas in OSPF and implemented virtual links if needed, testing authentication in OSPF, OSPF is used as the IGP and LDP is used for label propagation
* Implement OSPF routing with multiple areas for networks between sites. Implement totally stubby areas to lower the system resource utilization of routing devices to the network. Implement NSSA area to allow injection of external routes into the area and propagation into the OSPF domain.
* BGP is used for distributing routes over the backbone, Configuring BGP features like VRF, as-override etc., Expertise in creating Access control lists for layer-3 security and providing first hop redundancy using protocols like HSRP
* Mutual redistribution of OSPF and BGP routes using route maps. Explored using LISP for optimized ingress routing by creating map servers for host to site resolution and mapping
* Worked on multi-stage project plan to remove BGP from LAN, and replace with OSPF, in phase one, and in phase two with design and implementation of MPLS with OSPF OTP across the OIG WAN, thus removing BGP from all OIG edge routers, and securing all communications between offices with encryption
* Advanced and complex IPv4 and IPv6 unicast routing designs (OSPF) in multi-VRF environments in production MPLS network
* Convert Branch WAN links from point to point circuits to MPLS and encryption from IPSec/GRE to Get VPN, Configured IPSec VPN access for client to site remote access
* 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

**Layer-2 responsibilities include**

* Implementation and troubleshooting of complex layer 2 technologies such as VLAN Trunks, VTP, Ether channel, STP, RSTP and MST, protected switch ports using security features like BPDU guards/Filters, loop guard, port security
* Performed VSS on cisco catalyst 6500 series switches
* Upgrade IOS on new switch install, install provided configuration on new network equipment install and asset tracking
* Configured UDLD, LLDP, TACACS, VLANS on HP 2920, Experience in configuring static and dynamic LACP trunks, hands on experience in troubleshooting link flaps, VLANS, SNMP etc. Providing input on day-to-day security architecture policies and procedures
* Also, responsible for providing VPN access on JUNOS devices running JUNOS Pulse
* Extensively worked on BMC Remedy for creating the Change Requests (CRQ's), Work Orders, Incident Management
* Monitoring servers (Solar winds Orion Network Performance Monitor) Network Performance Management System Solar winds Orion (NPM) Network Configuration Manager System Solar winds Orion (NCM)
* Experience in consolidating sites and planning network backup security and redundancy network. And worked on IPS/IDS support and endpoint security support. URL Filtering and IP address filtering with help of Cisco ASA firewall
* Configure and install MacAfee IPS sensors, and Cisco ASA 5500-X with Firepower Appliances.
* Worked extensively in Configuring, Monitoring and Troubleshooting Cisco's ASA 5500 with ACL, NAT, Object Groups, Failover, Multi-Contexts.
* Modified internal infrastructure by adding switches to support server farms and added servers to existing DMZ environments to support new and existing application platforms.
* Manage multi-context Cisco ASA configurations
* Involved on working with McAfee web gateways in white listing website's, static content sites, and working with vendor on various issues like static sites and so on

**GSS InfoTech, Hyderabad, India                                                                  Oct 2011 – Sep 2013**

**Network Engineer**

**Responsibilities**

* Responsible for Installation, configuration and maintenance of Cisco 7200, 3900, 2800, 2600, 2500 and 1800 series Router/Cisco Catalyst Cisco 6500, 4500, 3750,2950 series Switches
* Key contributions include troubleshooting of complex **LAN/WAN** infrastructure
* Worked on Cisco routers 2950, 2600 and Cisco switches 4500, 2900
* Configure Cisco Routers/L3 Switches for EIGRP using route redistribution, filtering and securing the network routes using encryption and authentication
* Configured VLANs, Private VLANs, VTP, dot1Q Trunking, and VTP-pruning, STP like RSTP and PVST on switches. Implementing Security features like BPDU guards/Filters, loop guard, port security
* Maintenance and Troubleshooting of connectivity problems using Ping, Trace route
* Implement, build, Support and Maintain Cisco partners training labs based on various Routing/Switching/Data Center architectures using Cisco and VMware Virtualized Infrastructure
* Created pools for the nodes and assigned **Virtual IP’s** to those pools on F5 load balancer
* Implemented least connections algorithm for the **LTM**, **GTM**and defined the persistence
* Experience in implementing Client SSL and Server SSL for the authentication

**Value Labs, India                      June 2010-Aug 2011**

**Network Analyst**

**Responsibilities**

* Involved in configuration and management of different **Layer 2 switching** tasks which includes address learning, efficient switching etc.
* Dealt with the escalation problems from Level 1, Level 2 & Level 3 for routing, switching and WAN connectivity issues using ticketing system Remedy
* Experience in routing protocols like EIGRP, OSPF and standby protocols like **HSRP** application in the routers
* Configuration of Access List ACL (Std., Ext, Named) to allow users all over the company to access different applications and blocking others.
* Involved in configuration of WAN connection using a 3600 series Router and Frame relay method, Used various Network sniffers like Ethereal, TCPdump etc.
* Designed and implemented an **IP addressing** scheme with subnets for different departments

**Education**

Bachelors in Electronics communication Engineering, India, 2009

**Certifications**

Fortinet Network Security Associate Issued: Aug 2018 Expires: Aug 2020

Certified Meraki Network Operator (CMNO) Issued: Dec 2017

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| Cisco Certified Network Associate (CCNA) | Issued: Jul. 2012 | Expires: Nov. 2018 |
| Cisco Certified Network Professional (CCNP) | Issued: Nov. 2015 | Expires: Nov. 2018 |
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