

PROFILE

Experienced Senior Network Engineer with over a decade of extensive hands-on experience in network design, implementation, support, and troubleshooting. Possesses deep knowledge of network communications and a strong background in designing and deploying customized network systems. Proven track record in developing technical training materials, with a steadfast commitment to excellence, meeting deadlines, and maintaining meticulous attention to detail in all projects. Recognized for a unique ability to infuse kindness and compassion into daily network operations, fostering a collaborative and positive work environment.

CORE COMPETENCIES

1. Hands-on experience working with different models of Cisco/Juniper/HPE/Arista switches, routers, firewalls, load balancers, and wireless systems.
2. Extensive hands-on experience with complex routed LAN networks, Routers, and Switches, and worked on ISE 802.1X, ISE wired/wireless guest, and ISE trust sec implementations.
3. Extensive hands-on experience configuring, troubleshooting, and maintaining BGP, OSPF, EIGRP, ISIS, VLAN, and MPLS routing protocols on Cisco and Juniper environments.
4. Extensive working knowledge in Palo Alto, ASA, Firepower, FortiGate, and Palo Alto firewall platform.
5. Delivered and maintained IT security objectives in cost-effective and time-efficient manners while monitoring risks and vulnerabilities

CERTIFICATIONS

- Microsoft Certified Systems Engineer (MCSE), (CST)
- A+ Certified Associate
- Cisco Certified Network Associate (CCNA)
- CCDA-Cisco Certified design Associate
- JNCIA-JUNOS (Juniper Networks Certified Internet Associate) Training
- ECS-Certified Extreme Certified Specialist
- CCNP re-Certification (Implementing Cisco IP Routing & Switching)
- PCNSA -Palo Alto Network Security Administrator
- Brocade router/switch training
- NACE CAM2000 digital Headend training
- Extreme XOS Enterprise core and Data Center switch training
- Cisco SD-WAN Solutions (SDWAN300) deep-dive training

EXPERIENCE

Sr. Network Engineer
Silosmashers, Atlantic city NJ

09/20-2022 – Present

- DNA center experience configuration and implementation- Onboarding all network devices to DNA,
- Experience in using the DNAC to perform device IOS upgraded and scheduled devices reboot and DNAC Support and Optimization
- In-depth troubleshooting skills to resolve complex network issues across a broad range of technologies.
- Experience in the configuration, implementation and troubleshooting BGP, OSPF, EIGRP, MPLS routing protocols.
- Experience in the day-to-day management and implementation of OSPF, EIGRP and BGP environment
- Worked experience with Managing Cisco Meraki switching and Meraki access points.
- Worked on the migration of existing cisco AP to Cisco Meraki Wi-Fi solutions
- Worked on cisco Vxlan policy, multi tenancy, multi-link environment , ACI for cisco centralized policy management

platform.

- Provide guidance with security hardening with Palo Alto firewall implementation with established security zones to align with the three-tier architecture for separation of duties and least privilege.
- Managed firewall using FortiGate to allow or block IP, created policies, added different interface and VLAN installations, and designed and implemented Cisco solutions VPN Fortinet, VoIP.
- Experience in working with Cisco ASA firewall as well as FortiGate appliance, managing Cisco ASA firewalls.
- Worked on upgrading Cisco ISE consisting of over 10 ISE servers' site, and added an ISE cluster with minimal downtime.
- Worked on providing higher-level support on ISE-related issues, including off-shift and weekend support functions.
- Experience in managing Cisco ASA and Cisco firepower through the Cisco FMC platform.
- Extensive knowledge in configuring and deploying next-generation firewalls including Palo Alto, Cisco ASA and firepower, firewall.
- Extensive knowledge of administration and management of Palo Alto firewalls using centralized Panorama M-100 and M-500 devices
- Used Ansible scripts to manage systems configuration to facilitate interoperability between existing infrastructure and new infrastructure in alternate physical data center.
- Hands-on experience working with different models of Cisco/Juniper switches, routers, firewalls, load balancers, and wireless systems.
- Experience in upgrading the orchestrator & branch SD-WAN appliances with the latest code. Plan, design and document SD-WAN architecture.
- Configure & orchestrate Silver Peak SD-WAN for remote sites.
- Orchestrated the Router and switch upgrade from Cisco 4451 to 83k series and upgraded the switches 3550s to 93k series.
- Experience in troubleshooting and configuration for multiple technologies associated with Cisco security product lines including but not limited to: Adaptive Security Appliance (ASA)/Firepower, and ISE

Sr. Network Engineer
WiregateIT, Dover, DE

02/2015 – 9/30/22

- Conducted in-depth technical analysis of all systems, including the governance framework, architecture, and disaster recovery and business continuity; delivered gap analysis and recommendations, attaining 99% up time.
- Design and Implementation of the core network Juniper (EX4650, EX4300)
- Experience in working with Fortinet firewall administration, the configuration of FortiGate 3000, 3815 series as network traffic diagram.
- Improve network optimization by successfully implementing network performance management products for company's infrastructure.
- Experience in implementing new policies and adding new rules and objects via Cisco firewall management console (FMC)
- Knowledge of Cisco Meraki Switching -MS, security/ SD-WAN-MX400, policy based routing and centralized cloud management platform through Meraki Dashboard.
- Experience in configuring Cisco Meraki access point and deployment, LAN refresh task.
- Design implemented and documented the upgrade of core WAN switches to Cisco at 3 main data centers. Migrated over 200 WAN connections in each location. Upgrades include 40Gb redundant uplinks to all network sites.
- Designed and Implemented Cisco Nexus Platform, Cisco UCS & HP Virtual Connect Flex10 Expert in Data Center Technologies such as vPC, VDC, VSS, STP, FCoE, OTV & Fabric Path
- Highly Experienced in Cisco Catalyst 6500 Platform and its Service Modules
- Developed several tools and scripts written in Python 3 to automate and ease the creation of MOP's and change management configurations in preparation for service affecting maintenance.
- Perform update of PAN-OS in Palo Alto firewalls, Palo Alto Wildfire, threat prevention, URL filtering
- Implementation, troubleshooting, documentation, and maintenance of Juniper Aruba wireless and Palo Alto devices.
- Deployed a highly available Cisco infrastructure based on Cisco DNAC, ISE, router, and access point.
- Experience with configuring DMVPN tunnels for the MPLS ISP clouds, which are responsible for transport independent design of IWAN.
- Implemented Load Balancing solutions on F5 BIG-IP LTM, Cisco CSM & Array APV/TMX Implemented Firewall Security in compliance with PCI on Cisco ASA, FWSM & Checkpoint
- Day to day management and maintenance of the DelDOT core network, that houses Extreme core switches and ERS switches which include -Summit X480, X650, X690, ERS 3000 and SLX 9140 Extreme series and Juniper- Junos-MX480, EX4600. Cisco Nexus 7000 and 7700, Cisco Catalyst 9500
- Working as the subject matter expert for ArubaOS and Aruba central cloud management platform.
- Design and implementation of several Aruba Wireless deployment projects, cloud, and controller base implementation.

- Design and integrated the state Drone video output feeds to ITMS VMS network system. Designed and implemented the DOT video management systems (VISM/EXACQ) and implemented a Video archiving/ storage platform.
- Design and implement the Wowza video distributing streaming engine that pushes feeds to deldot.gov and to the appropriate stakeholders.
- Installed and tested fiber optic patch cords. Supervised cable splicing and fiber acceptance testing, Fiber OTDR
- Responsible for managing the state fiber optic deployment project, both multimode and single mode strands.
- Design and implementation of the state's 4.9 wireless network deployment. Which includes,
- Point to Point (PTP) and point to Multipoint design and implementation with Cambium client devices and backhaul network connections to the hub.
- Designed and Implemented Cisco Nexus Platform, Cisco UCS & HP Virtual Connect Flex10
- Expert in Data Center Technologies such as vPC, VDC, VSS, STP, FCoE, OTV & Fabric Path
- Installed and configured Meraki (MX80, MX60) Appliance via Meraki MX400 Cloud platform
- Installed and configured Cisco Meraki (MR66, MR18) wireless Access points in the warehouses Installed
- Experience working with video management systems (Exacq vion and Wowza systems) and Axes camera units.
- Configured and troubleshooting MPLS, BGP, EIGRP, VPN, VLANs, STP, VTP, Trunks, DNS, DHCP Troubleshooting Cisco routers, APs, Switches, Fortinet Devices and Meraki appliances.
- Establishment of SOLARWINDS Orion Network Monitoring System tool that examines all routers nationwide thus provides necessary parameters like Bandwidth usage, Response time, CPU and Memory usage, etc.
- Designed and implemented a DSP helicopter private security video feed for the state police and aviation team by creating a secured VRF. Worked with vendor IMT for the antenna.
- Responsible for configuring port parameters, layer-2 forwarding, and port load sharing.
- Collaborate with Fiber team to understand field device and operations impact of any known outages or upcoming project.

Network Engineer
Campus Televideo Bear, DE

03/2014 - 04/2015

- Implementation of IPTV and video distribution across Campus Tele video client University campuses.
- Perform CMTS and router maintenance and assisted with troubleshooting, Configurations, node move.
- Implementation of secure web authentication platform, CTV stream, seamlessly
- Responsible for utilizing the Spectrum network monitoring tool to respond to any VOD, router, and CMTS alarm that arise on the network and see those issues through to resolution.
- Implementation and troubleshoot Cisco unified communication solutions including call processing, voice gateways, UNITY & LAN/WAN infrastructure.
- Cable TV using clear QAM standard, IPTV, streaming video, and emergency alert systems.
- Vendor's management, coordination of internet drainage, evaluations, and RFP write-up.
- Project Management Support for educational services, Lead Planning and Design across high institutions over 250 schools.
- Reset wireless design project, catering for over 16000 Resnet users. Core cisco 6509, WS-3750, 3560, Cisco, 2950S, 2960S, Aruba, CMTS Access switches, 4 SFP GBIC Ports/with FlexStack option, QOS.
- Operations and Maintenance of all Campus Televideo IP/MPLS routers consisting of multivendor equipment like Cisco and Juniper and provides expertise and consultancy to necessary departments like Access NOC, Transmission NOC, and Data NOC.
- Oversaw and managed a team of engineers in their day-to-day duties and provided training when needed and coordinated work project schedule.
- Site survey ran Heat-map, AirMagnet Survey tool. Supervised wireless site installation using.
- Aruba / Cisco controller base unit, 104 & 105, Cisco Aironet, APs, and configuration of 802.11 a/b/g/n Wireless Network equipment. Aruba AOS Controller & IAP
- Design and deploy the most accurate indoor & outdoor wireless LAN network using Ruckus, EnGenius HP, Aironet 700W series, Meru, Apple flagship AirPort Extreme AP (802.11n/a/b/g/ac
- Planning and implementing redundancy to future or next generation technologies in ways that meet business needs.
- Provide switch architecture, configuration, installation, backup/recovery, and monitoring. Perform diagnostics on switches, Command Line Interface structure.
- Create system documentation for troubleshooting, business continuity, and maintenance. Collaborate with Fiber team to understand field device and operations impact of any known outages or upcoming project.
- Assist with advanced deployment and support of ITMS Core switching, Fiber, VWZ circuit, 4.9 GHz, 802.11 and

NOC Support Engineer II
Vanguard Corporation Wayne, PA

01/2013 - 02/2014

- Provided intermediate level 2&3 Telecom network support. Accepting escalated /elevated cases from the Support Center and corporate groups.
- Identified performance issues and interpreted trends (e.g., traces of network traffic).
- Wireshark, Solar winds, PRTG, WUG and Nagio.
- Experience working with F5 LTM/GTM, Big-IP, load balancing, iRules, and WAN acceleration.
- Provided support for 4400 and 4800 appliance checkpoint firewall and Juniper SA4500 and SA6500 in an enterprise environment.
- Cisco Nexus 7000 and 7700 models, Cisco Catalyst 9500 Series and The Cisco Redundant Power System 2300 (RPS 2300)
- Worked with various routing protocols, including OSPF, ISIS, ERGRP RIP and BGP routing protocol environment.
- Installed and configured standard network infrastructure, including software, patches, upgrades, applications, and/or hardware operating on one or more systems.
- Added, updated, and closed records in the IT Problem Management and Change Management databases.
- Monitored records to ensure status was accurate and complete and actions were on target.
- Reviewed related records to identify requests that may have an impact on the network.
- Troubleshoot efforts of information systems analysts evaluating technical analyses and briefed project management partners through daily reports to leadership
- Managed code changes supported system outages and provided strategic resolutions to enhance VOIP and WAN systems.
- Process provisioning requests for routers & switches, ASA firewalls, wireless devices, etc.
- Troubleshoot. IX. Participated in special projects and performed other related duties as assigned.
- Developed documentation, including policies and procedures. Created diagrams, including network designs. Administered the Telecom network documentation repository.

Network Design Engineer
Lenox Corporation, Bristol, PA

05/2013 - 12/2013

- Monitored and updated the SGUIL IDS (Intrusion Detecting System) firewall and database.
- Linux agent security incident, like brute force attacks.
- Maintained the RA Security boxes and ASA /check point firewall. Planning, designing, implementing, and maintaining network carrier class, and network service provider backbone.
- Layer 2 Technologies: Bridges, Switches (CatOS & IOS), Ether-channel (PAgP & LACP), • Spanning-tree (PVST, RSTP, and MSTP), Trucking (802.1Q & ISL), Frame Relay, MPLS.
- Layer 3 Technologies: Routers, Routing Protocols (BGP, OSPF, ISIS, EIGRP, HSRP, VRRP), Route
- Optimization using (Summarization, Aggregation, Redistribution, Filtration), IP Addressing, IP Subnetting, VLSM.
- LAN/WAN Technologies: Ethernet (FastEthernet, Gigabit Ethernet), Frame Relay, Leased Lines Experience using Cisco call manger, unity voice mail, and voice gateways.
- Ability to design highly available, resilient, and scalable networks, especially within retail sale and Resnet /campus and health care environment.
- Monitored the enterprise corporate and retail (MPLS) network using IPMONITOR, Solar winds,
- PRTG, WUG and Nagios for network incidents and downtimes. Troubleshoot and solved network incidents; worked with vendors and with local ISP to solve issues ASAP by keeping up SLAs.
- Scanning the network manually and created L2 and L3 Visio Diagrams about the whole retail environment, corporate offices' network and colo locations.
- Maintained the backups on the TFTP server. Upgraded IOS images. Replaced Cisco routers and switches by reconfiguring them and sending them for replacement. Upgraded the bundled T1 connections to DS3/Ethernet circuit.
- Changed VLANs, checked the interfaces/cables for CRC errors, provided network support for the company's infrastructure, and solved support tickets in the SLA timeframe.
- Maintained the content switch environment (Cisco Content switches 11503) for service activations, deactivations or created and activated new services.

- Monitored the network bandwidth by analyzing network reports for bandwidth utilizations.
- Hardware maintenance and repair for network equipment in the Lenox's datacenter. Running and testing cables. Racking and stacking.
- Worked with Cisco routers and switches: Cisco catalyst 2600 switch, 2800 & 3500 switch, 3600 & 3800 series routers and Cisco L3 switches like 6509 & 4500. Also, with Adrian Netvanta 3200 routers etc.

Level - 2 Network Engineer 01/2011 - 05/2013

AT&T MIS, Piscataway, NJ

- Recruited by AT&T –MIS to provide engineer 2 escalation point support for AT&T business customers, duties include ISP to client MPLS setup, Routers/switches Configuration, CMTS, DNS, DHCP, QOS and routing issues.
- Working experience of Cisco and Juniper routers, especially the 7600, CRS, T-1600, MX960 series is preferred.
- Working experience in roll-out of hardware and software of CRAN/Commercial network devices
- Working experience of Engineering design and support CRAN services within Central Division data, video, and voice products
- Worked on monitoring, isolating, and troubleshooting end-to-end network problems across the AT&T network environments. Participating in day-to-day monitoring the CRAN and VOD, CMTS.
- Managed Cisco 4506 and 6509 Core Switches with dual supervisors and 10GB Fiber links.
- Managed and Configured the WAN infrastructure, consisting of multiple T1 and T3 lines, Cisco routers, Cisco switches, Juniper router and Load balancers. MPLS, QOS, COS, VOIP
- Working knowledge on IP-PBX and IP-Phones, (Cisco, Nortel, Avaya, Polycom) SIP Trunking Served as a lead Network Engineer with AT&T, where he helps orchestrating their network design projects and servers as a liaison between AT&T and their vendors.
- Provided Level 2 engineering support for Juniper Networks SA2500, SA4500, and SA6500 SSL VPN Appliances and T series high-end AT&T core routers.
- Provided QOS and traffic prioritization, implementation, and support for AT&T business customers.
- Provided support for routing protocols, OSPF, EIGRP and BGP AND Transport to include, T1, MULTILINK, T3, OC3, ATM circuits.
- Troubleshot IPSEC, ESP, ISAKMP and SSL when it comes to VPN Tunnel issue.
- Extensive experience with SIP Call processing and SIP Supplementary Services.
- Excellent multi-tasking and time management skill set.
- MPBGP, MPLS, VPLS, BGP/MPLS, IPVPN, OSPF, PIM&RSTP/MSTP
- Provides 100% full IP expertise/support, availability and on-call function 24 by 7 to cater all.
- Network installation problems nationwide regarding AT&T Network provided ISP network. Provides IP Recommendations and Optimization regarding Bandwidth Upgrade, Network Protocols Reconfigurations, and Traffic Engineering for AT&T Sales team.

Network Engineer

01/2010 - 01/2011

Broadview Networks, King of Prussia, PA

- Managed a team; responsible for Provisioning, testing, and troubleshooting SS7, SIP, MGCP,
- ITSP and T1/T3, Ethernet pipe.
- Working experience of Cisco and Juniper routers, especially the 7600, CRS, T-1600, MX960 series is preferred.
- Working experience in roll-out of hardware and software of CRAN/Commercial network devices
- Working experience of Engineering design and support CRAN services within Central Division data, video, and voice products
- Good knowledge of VoIP quality measurement models - E-model, PESQM, POLQA Good understanding of Key voice quality metrics (Delay, Jitter, packet loss)
- Hosted weekly calls with my Network Analysts and provided oversight on what they are currently working on and provided help when they needed it.
- Working knowledge on IP-PBX and IP-Phones, (Cisco, Nortel, Avaya, Polycom)
- Managed, maintained, and supported LAN & WAN environments for all Broadview customers within the USA and worked with local IT support staff on issues in their environments.
- Cisco 2950, 2960, 3750 switches were used as access switches in various environments Cisco 3750 Stacked, 4948 and 4506, 6509 switches were used as Core switches in various environments.
- Cisco 2811, 2821, 3745, 3845, 7206vxx Routers were used as edge or border routers Proficient in configuring, supporting, trouble shooting, debugging Cisco IP Telephony networks, Cisco and Juniper Edge Routers and

firewalls.

- Network Routing consists of 2 bonded T1's for Frame relay being used by secondary ISP Created Visio design diagrams to give to the centers after implementation has been completed.

IT Manager

01/2007 - 11/2009

Essans Networks Clementon, NJ

- Managed and Maintained the Network & Systems for 40 different subsidiaries that Essans networks owns in the US and Canada staff management and periodic training sessions.
- Vendor management and coordination with different major vendors
- Maintained and supported LAN, WAN, TCP/IP, MMC, IIS 5.0/6.0, DNS, Cisco 1721, 1751, 1841, 2620XM were used by remote sites to connect back to the US data center.
- Utilized Cisco call manager, Unity server, SIP, QOS, PSTN, Ip Telephony, Data/ VoIP management.
- Oversaw and managed a team of engineers in their day-to-day duties. Managed Wireless LAN controller.4402 and 16 Aeronet access points Audio codec conversion (G.729/G.723 to G.711) Signaling between voice gateways, CCM and UM.CCM routing, Call Admission Control, failover routing, SRSTManaged a Cisco ASA 5505 to segregate traffic between the wireless network for bar-coding and production network.Managed multiple internal projects across all subsidiaries (AD, DNS, ISDN, Industrial Wireless Implementation for Bar-coding)Tier3 Technical

Support Analyst 03/2004 – 02/2007

Comcast, Inc., Plymouth MT, PA

- Provided business-clients with efficient support – Responded to phone calls, emails, and in-person requests.
- Installed software, configured, and tested customer PC's, analyzed functionality of peripheral appendages.
- Day to day Managed and implementation Comcast IP migration Data base, for Reserve IP customer Migration to RIP
- Provided assistance with Network Management tools for the Comcast network.
- Manage trouble tickets in Remedy TTS either working directly with technician or through Communication with dispatching dept.
- Reviewed various Network Firewall logs to spot potential problems and documents.
- Accordingly
- Day to day maintenance of Comcast head-end cisco router, juniper routers and CMTS • Network monitoring of CMTS, CRAN and VOD Configuration and node move
- Troubleshooting events.
- ISIS and BGP issues and IPV6
- Worked with internal Ticketing systems and email to respond promptly to requests.
- Provided 3rd level support for Comcast business customers and internal team.
- Servers as escalation point for lower Tiers and Comcast management team.
- Maintained and supported LAN, WAN, TCP/IP, DHCP, MMC, IIS 5.0/6.0, WINS, and DNS.

EDUCATION

University Of Phoenix- Bachelor's degree in information technology

2013