Education

BA Industrial Technology with Specialization in Networking (2006)

Central Connecticut State University, New Britain, CT

Technical Skills

Applications

 Apache httpd, BIND, Cisco AnyConnect/ASDM/FTD/Meraki/Umbrella, EVE-NG, FRRouting, gcc, iptables, KVM, Libreswan, Linux kernel, MariaDB, Microsoft Excel, Microsoft Visio, MySQL, Nagios, Nessus, netcat, nmap, OpenNMS, OpenSSH, Openswan, OSSEC, Qmail, Quagga, rsyslogd, SecureCRT, Sendmail, SolarWinds, Splunk, Subversion, Sudo, tac plus, tcpdump, VMware ESXi, Wireshark, Xen

Cloud

 AWS, Cisco CSR1000v/FTDv, Direct Connect, EC2, Equinix Fabric, Hybrid Cloud, Microsoft Office 365, VPC

Hardware

- Cisco Firewalls: ASA 55xx, Firepower 11xx/41xx, FTD
- Cisco Routers: ASR 1xxx, ISR 891/1841/19xx/26xx/28xx/29xx/39xx/42xx/43xx/44xx, 7206VXR
- Cisco Switches: Catalyst 2950/2960/3560/3650/4000/4500/4948/6500/9200/9300, Nexus 3600
- Juniper Routers: M5, M7i, MX240, SRX3xx
- Server hardware assembly, upgrades, troubleshooting, RAID0/1/5/6/10

Networking

• BGP, DHCP, DMVPN, DNS, GRE, HSRP, IPsec, IPv4, IPv6, LDP, MPLS, NAT, Netflow, OSPF, SD-WAN, SNMP, STP, TACACS+, TCP, TLS, VASI, VPC, VRF, VRRP, VTI, VTP, UDP, Wi-Fi

Operating Systems

• Cisco ASA, Cisco FTD, Cisco FXOS, Cisco IOS, Cisco IOS XE, Cisco NX-OS, FreeBSD, Juniper Junos, Linux, Microsoft Windows

Programming / Scripting

• Bash, C, expect, HTML, JavaScript, JSON, PHP, Python, SQL, TCL, XML

Work Experience

Director of Network Engineering & IT Security (June 2018 – October 2023)

Ventus Wireless, LLC - Norwalk, CT

- This was a very hands-on senior engineering position which involved routinely guiding staff on highly technical issues, with an emphasis on security, efficiency and automation.
- Led and mentored team of 6 employees including Network Engineers, Systems Engineers and Technicians.
- Worked closely with other department leaders and the C-suite in support of resolving escalated customer issues and routine project requirements involving network, systems, or security.
- Designed next-generation production data center environment and MPLS network, and led the team which successfully implemented it, which significantly improved network reliability, scalability and security.
- Designed and implemented hybrid AWS corporate network between VPCs and Equinix data centers, as well as deployment of multiple Cisco Firepower appliances for company-wide remote access VPN.
- Developed custom software applications to improve efficiency, including SBOM/CVE management for hundreds of Linux servers, Cisco contract management via SolarWinds and SmartNet REST APIs, and automation of configuration for common backhaul VPN tunnels and associated BGP configurations.
- Executed routine internal and external vulnerability scans via Nessus Professional.
- Managed PCI DSS compliance program, including third party vendors involved with routine penetration testing, network scans, and formal compliance reporting.
- Monitored security mailing lists and other news sources for bleeding edge Cisco/Linux vulnerabilities, and regularly established action items to protect critical systems from exploitation.

• Performed daily security event analysis via HIDS (OSSEC), SIEM (Splunk), Cisco FMC and SolarWinds.

Senior Network Engineer (April 2011 – June 2018)

Ventus Wireless, LLC - Norwalk, CT

- Responsible for service provider PCI DSS compliant financial network and systems in a 24x7x365 environment consisting of over 150,000 edge locations, including a core network spanning 3 data centers with multi-homed WAN circuits, hundreds of Linux servers and Cisco routers, and numerous redundant backhaul connections to payment processors and other associated private network destinations.
- Acted as the top tier technical escalation point for data center, network, security, or systems issues.
- Identified and arranged remediation of security vulnerabilities in network and server infrastructure.
- Installed, configured, and maintained SolarWinds software (NPM, NTA, SAM) for monitoring of critical network equipment and Linux/Windows servers.
- Managed data center operations, including power distribution, UPS service contracts, equipment installation, and cabling. Assured that all work adhered to defined standards.
- Managed enhancements to network and server infrastructure pertaining to PCI DSS compliance requirements.
- Coordinated hardware upgrade of core routers, switches and firewalls, including IPS implementation and segregation of customer traffic into multiple VRFs.
- Designed and implemented unique networks based on customer requirements, including associated technical documentation and Visio diagrams. This includes a custom network for a Fortune 100 financial institution's ATM machines, including private cellular APNs and associated MPLS connectivity via various carriers, as well as a redundant private WAN network for retailer's portfolio of 250+ stores.
- Developed software applications for use on a proprietary Linux-based router platform, with the primary focus on C and Bash scripting. This includes software for interfacing with Sierra Wireless 4G/LTE modules.
- Frequently interfaced with Sales and Solutions Engineering teams on new business opportunities, including attending meetings with existing or prospective customers.

Systems Administration Supervisor (2008 – 2011) / Systems Administrator (2006 – 2008)

OLM, LLC - Trumbull, CT

- Responsible for all technical aspects and security of 2 data centers and over 1,500 servers in a diverse 24/7/365 environment consisting primarily of RedHat/CentOS/Debian/Ubuntu Linux servers.
- Maintained Cisco network of 7206 routers, 6509 switches, 4xxx switches and over 100 29xx access switches.
- Configured BGP peering with 4 Tier-1 network providers, providing routing for 3 data centers. Monitored utilization on WAN circuits and load balanced ~1 Gbps of traffic to minimize usage costs.
- Implemented IPv6 network wide and established dual stack IPv6 BGP peering with Internet service providers.
- Monitored servers and network components via OpenNMS and Nagios with custom plugins.
- Developed a wide variety of custom applications, including a staff portal, client portal, remote reboot interface, Xen virtual server provisioning system and order processing system.
- Performed security threat analysis for hundreds of Linux servers. Planned and implemented solutions to protect servers from vulnerabilities and exploits. In some cases this involved performing custom back porting of C source code patches to legacy operating system versions.
- Performed troubleshooting of Linux issues, including advanced recovery techniques to restore operations after hardware failure.
- Performed hardware assembly and troubleshooting for a wide variety of Intel and AMD servers.
- Trained other staff members on proper technical procedures.
- Worked closely with Technical Services Manager on data center improvements and hardware orders.
- Provided clients with direct Tier-3 level support and worked closely with Technical Support staff.

Systems Administrator (2004 - 2006)

RP Design Web Services - Cheshire, CT

- Managed software, security, and overall operation of Linux servers, including planning and purchasing.
- Administered an office LAN, including Macs, Windows PCs, and Linux servers.
- Developed several web applications including an interface for administration of customer e-mail services.
- Coordinated with clients both in person and over the telephone to resolve day-to-day issues.
- Performed hardware maintenance on servers at co-location facility.