Network Architect and Engineer with a record of leadership.

Experience AOL

May 2016-

Senior Manager, Network Services.

current

Led the Production Networks and Application Networks teams to provide network infrastructure as well as application delivery, load balancing, CDN, DNS, GSLB, and similar services. Had continued responsibility for network architecture and many of the technical lead roles of the Production Networks manager. In the face of severely dwindling resources, my teams supported massive growth of AWS services, took complete ownership of network tooling, and kept ahead of necessary network hardware and capacity upgrades.

October 2013-

Manager, Production Networks.

May 2016

Led the Production Networks team, responsible for data center and backbone operations, while continuing architecture role and being the final escalation point for network issues. Team was responsible for seven data centers on three continents, with hundreds of routers and thousands of switches, which in turn supported tens of thousands of servers, and an international, transit-free backbone, providing inter-data center and virtual office WANs and Internet connecitivty. The team turned data centers up and down, deployed new designs and services, deployed IPv6 to data centers, provided support and automation for new network connections, built custom solutions for partner networks and products with unique needs, encrypted the entire backbone, and supported networking needs for products moving to public cloud.

July 2012-

Senior Network Architect.

October 2013

Responsible for 2-5 year network vision, new data center designs, testing new technologies, and staying abreast of new trends. Provide technical leadership for other network teams, including taking escalations and providing guidance and help during outages. Helped design and implement a service-chained data center architecture.

46315 Stratton Terrace #303 − Sterling, VA 20165

46315 Stratton Terrace #303 − Sterling, VA 20165

46315 Stratton Terrace #303 − Sterling, VA 20165

iCore Networks

October 2011- Network Architect.

July 2012 Designed and deployed new network architectures to support VoIP platforms, ISP access, and private and public customer connections. Tier IV support for networking issues. Mentored junior engineers. Provided improvements in documentation, procedures, and standards.

Arbinet

September 2010- Lead IP Engineer.

September 2011 Lead engineer for the Arbinet Exchange platform, which provided an optimized BGP feed and flexible ISP connectivity at various network exchange points around the world. Deployed Exchange platform in new locations. Provided software support for the custom routing engine. Tier IV support for operations

and sales.

University System of Maryland

November 2006- Senior IP Network Engineer.

September 2010 Engineering and maintenance of statewide IP and optical networks, providing services to various UM campuses and other schools. Responsible for configuring, monitoring, and maintaining all routing, switching, and DWDM gear. Operated a centralized teleconferencing system used for remote attendance of classes and for USM conferencing needs, including development of custom scheduling and

control software. Responsible for disaster recovery procedures.

XO Communications

June 2004- Network Engineer.

June 2004

October 2006 Tier III/IV support for IP and VoIP network. Design and development for future network architectures. Developed procedures for network maintenance, upgrades, and new deployments. Programming support for configuration automation, network status monitoring, hardware tracking, and product testing. Ongoing support for legacy systems.

Allegiance Telecommunications

April 2003- Director, Data Engineering.

Responsible for engineering teams supporting WAN, LAN, and PSTN operation. Provided direction for backbone evolution and deployment of new network features. Managed vendor relationships and new product and hardware testing and acceptance. Liaison to Operations, Sales/Marketing, and other Engineering groups. Negotiated peering relationships with other backbones. Final escalation point for network issues.

December 2001- Senior Manager, Data Network Engineering.

April 2003 Managed IP network engineering team. Designed and implemented new backbone architecture, and merger of multiple acquired backbones into one. Hands-on support for operations and development staff. Final technical escalation point for network issues.

Intermedia Communications

April 2000- Senior Manager, IP Backbone.

December 2001 Managed IP Backbone team. Responsible for IP backbone architecture, with a focus on improving capacity and lowering costs. Deployment of new network features, including MPLS. Final escalation point for network issues.

ONYX Networks

August 1999- Infrastructure Engineer.

April 2000 Design and deployment of backbone routing protocols. Design and development of web-based administrative and network monitoring tools.

DIGEX/Intermedia Communications

July 1998- IP Design and Development Engineer.

August 1999 Network architecture. Design and testing of new products and services. Testing and certification of new network hardware platforms. Developed software for task automation and statistical analysis. Training and documentation for operations teams. Tier IV support for network issues.

November 1996- Manager, IP Routing.

July 1998 Managed team of IP Routing Engineers, responsible for maintaining the backbone, supporting installs and customer service, responding to outages, managing capacity, and turning up new routers and circuits. Defined policies and procedures, developed tools, enforced policies, and provided Tier IV support for network issues.

September 1995- IP Routing Engineer.

November 1996 Responsible for maintaining the backbone, some field operations, new customer and circuit installations, and responding to outages. Tier III support for customer issues. Scripting of common tasks, such as new router configurations.

July 1995- Network Operations Engineer.

September 1995 Tier II support for network issues. Helped design and build the NOC network and systems, and implemented tools to monitor customer and backbone circuit status. Helped troubleshoot circuit issues.

Networking Skills

Protocols IPv4, IPv6, BGP, ISIS, OSPF, MPLS, LDP, RSVP, RIP, STP

Layer 1/2 Ethernet (10M-100G, copper and optical, LAN and WAN), SONET,

CWDM/DWDM, ATM, Frame Relay, LAG/MLAG, DS0-3

VPN/Security ACLs, Stateful Firewalls, Encryption, IPSec, MPLS L2 and L3 VPNs

Other NAT, Load Balancing, 802.11 Wireless, Multicast Routing, QoS/CoS

Other Computer Skills

OS Linux (Debian, Ubuntu, RedHat), Unix (NetBSD, SunOS/Solaris), OSX,

Windows

Systems DNS (BIND), Sendmail/MailScanner/SpamAssassin, Apache, DHCP, NTP,

Administration NFS, system security (iptables, fail2ban)

Programming C, Perl, Javascript, Bash, some Java/Python

Other Web design (CSS, CGI), Database (MySQL, PostgreSQL), VoIP and Video

Conferencing

Education

1991–1995, Bachelor of Arts, English, University of Maryland, College Park.

2009-2010 Creative writing focus.

Other

Patent

9,461,922: Systems and Methods for Distributing Network Traffic Between Servers Based on Elements in Client Packets (co-author). Describes a system of using SDN (eg, OpenFlow) and a consistent hashing method to create a load balancer out of a network of low-cost switches.