**Mark Foster** 

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## **CORE SKILLS**

Operating systems – Linux (Ubuntu, Debian, Red Hat, CentOS), UNIX (FreeBSD, HP-UX, AIX, Solaris) Windows, MacOS Server applications - BIND, Apache, Nginx, HAProxy, Keepalived, OpenLDAP, Postfix, Sendmail, Exim, Samba, Tomcat Development - Bash, SQL, HTML, Perl, Java, Ruby, C/C++, Python, XML, Subversion, Git, Gitlab, Bamboo, Bugzilla, Jira Monitoring & Infrastructure – Ansible, Sensu, Puppet, Chef, CFengine, Nagios, Munin, Monit, Cacti, Zabbix Security - Nmap, Nessus, Snort, Firewalls, pfSense, IPFilter, Iptables, OpenSSL, PGP/GPG, KeyTool, x509 Certificates / PKI Databases (DBA) - MySQL, PostgreSQL, SQLite, MongoDB, Redis, Oracle, Microsoft SQL Server, Sybase Virtualization - VMware (vSphere ESXi), KVM, XenServer, qemu, VirtualBox, FreeBSD jails Network Protocols – IP, ARP, TCP, UDP, DNS, DHCP, LDAP, NIS, NFS, NTP, SMB, SNMP, SSH, SSL/TLS, Wireshark, tcpdump

# WORK EXPERIENCE

### ExtraHop Networks Sr. IT Security Engineer

2014 - Present in Seattle, Washington

Manage IT infrastructure, operations, security and application support, specifically Googe G Suite, Cloud, Amazon AWS, Azure, Linode, Vmware ESXi and KVM platforms. Management of hundreds of Ubuntu LTS servers, desktops. Improved asset management using Netbox. Perform periodic security assessments and vulnerability scanning/remediation. Create Ansible playbooks and roles to manage configurations and deployments. Subject matter expert for DNS, LDAP and Ansible.

## EMC<sup>2</sup> Isilon Recovery Team Lead Engineer 2011 – 2014 in Seattle, Washington

Tier 3 support of Isilon "Scale-out NAS" storage clusters. Enterprise clients, Fortune 500, Universities, Financial and Research institutions. Recognized as Subject matter expert in NFS, Kerberos, LDAP, NIS, Samba and FreeBSD. Served 18 months as Coach for Unix Protocols team advising 30+ team members around the globe. After that joined the Remote Recovery team challenged with the most severe data loss-or-unavailable cases.

#### BitPusher Senior Systems Engineer 2008 – 2011 in Seattle, Washington

Worked as consultant and service provider with primary oversight of multiple clients, mostly web startups (some YCombinator) with 1st or 2nd round funding and growth challenges (i.e. scaling), Managed their server infrastructure and operations: network, systems, security, database and web application stacks (LAMP, Ruby on Rails etc), virtualization, monitoring, performance and scaling. Heavy use of monitoring tools (Nagios, Cacti, Munin, Zabbix, NRPE, SNMP Rrdtool), LDAP and DNS. Security assessments & PCI compliance, Multiple datacenter migrations. Clients included: WuFoo (acquired by Survey Monkey 2011), Offbeat Creations (acquired by Playdom then Disney in 2010), Serious Business (acquired by Zynga 2010), Electronic Arts (EA), Sendgrid, Mesmo (GSN), Soompi, Dropsend

### Port of Seattle Senior Linux Server Engineer 2004 - 2008 in Seattle, Washington

Managed 75+ Linux and HP-UX servers, Redesigned the Port's DNS architecture - migrating to BIND9 on Linux co-existing with Active Directory. Played a key role in designing and implementing large-scale virtualization effort using VMware VI3, ESX server, Platespin P2V and backup solutions. Developed, documented and nurtured system standardization and infrastructure management tools (CFengine, Nagios, CVS, Yum and RHN). Improved system & network security leveraging Nessus, nmap, Snort+ACID (NIDS), IPtables, tcp\_wrappers. Security scanning and vulnerability assessments. Establish patching procedures and cycle. Actively participated in change management and security team meetings. Collaborated with Windows server engineering, networking, security and systems development groups to determine/implement solutions. Lead role as WebSphere administrator. Key player in Websphere upgrade from 5.0 to 6.1.

### VeriSign System Engineer 2000 - 2004 in Seattle, Washington

VeriSign Naming and Directory Services, formerly know as VeriSign Global Registry Services acquired eNIC in 2001.

As primary system engineer for .CC, .TV and various other CCTLDs (country code top-level-domains), I managed nearly 100 FreeBSD and Linux servers, IPFilter, IPtables, Netscreen and Sidewinder firewalls, Cisco and Alteon load-balancers/routers, network security, assorted MySQL and Oracle databases, ccTLDroot-listed DNS nameservers running BIND. I also performed programming and system architecture (design) by working with other team members designing applications which used: DNS(BIND), Email & Web Forwarding, Apache+mod\_ssl, mod\_perl, FastCGI, Java, Tomcat, Struts, LDAP (OpenLDAP), MySQL and Oracle.

# Altrec.com Lead Engineer 1998 - 2000 in Kirkland, Washington

Altrec.com began as Joppa in Seattle, then as Life Outside. The Altrec.comwebsite launched in March 1999 with the belief that spending time outside, whether climbing a mountain or taking a quiet hike, helps us to live a healthy, balanced life.

Developed and launched the full-scale e-commerce web site (altrec.com) with a team of 4 programmers. Determined appropriate site architecture

- using Apache web server and Java on Linux and SQL Server database. Built and maintained development and deployment systems.

Network/system administration, including migration from peer-to-peer to client-server (domain) topology. Deployed multiple servers including Exchange Server 5.5, DHCP, DNS, HTTP, Proxy, FTP, Samba and routers with packet filter and NAT. Managed team of five.

### Medius Interactive Webmaster, Developer 1995 - 1998 in Seattle, Washington

Webmaster, developer and primary system administrator for the web sites of the New York Yankees, Atlanta Braves and Seattle Mariners, among others. Web development (CGI) using Perl, Java, Javascript, HTML and mSQL/MySQL. Created uForum software. System administration on SGI, Linux and Sun platforms. Web server installation and configuration (NCSA, Apache, Netscape, IIS). Database administration.

### Boeing Technical Illustrator and CAD Drafter 1992 - 1995 in Washington

Produced technical illustrations for components maintenance manuals. Scanned printed drawings and converted to vector (digital) format. Beta tested Catia v4 rollout. Used BOGART illustration system, CATIA, Flythru and board drafting.

## **EDUCATION & TRAINING**

### CompTIA Advanced Security Practitioner (CASP+) (2019)

Computer security

#### Digital Forensics (2012)

Computer and mobile device forensics, evidence handling

#### Sentinel DHS Training (2007)

Cybersecurity - Incident Handling and Response

#### Computer Forensics Course (2006)

**Fundamentals** 

### CISSP Certification (2004-2010)

Certified Information Systems Security Professional CISSP #57439

### MCSE Certification (1999)

Exams: NT Server, Windows 98, TCP/IP Networking, SQL Server 6.5 Admin.

### AA Degree (1998)

Courses: Calculus, Physics, C programming, Philosophy, Desktop Publishing.

## Certified Technical Illustrator / Drafter (1992)

Courses: Engineering Drafting / Technical Illustration.

## AFFILIATIONS/OTHER

- Greater Seattle Linux Users Group (GSLUG) co-leader
- Founder and board member of Free Geek Seattle
- Seattle BSD Users (SeaBUG)
- Seattle Area System Administrator's Guild (SASAG)
- Linux Fest Northwest (LFNW) 3x presenter and attendee
- FreeBSD Ports Maintainer since 2004
- Talks/Presentations: Ansible, DNS on Linux, Puppet, pfSense, Packaging (RPM/DEB), Xca, Exim, Nmap & Nessus

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