

## Geoffrey M. Silver

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**Goal:** A senior-level Architect or Engineering position in a strong company with a fast-paced, challenging work environment.

### **Skills:**

*Operating Systems:* Linux (Red Hat, Mandrake, Debian), Unix(Solaris 2.5.1-10, HP-UX 10.20-11.11, AIX 4.3, Irix 6.2-6.5), FreeBSD, OpenBSD, VAX/VMS, DOS, Windows 3.x-XP/2003, Mac OS 8/9/X , OSF/1, and SCO Unix.

*Hardware:* EMC and StorageTek FC-AL arrays, STK L-series tape changers, NetApp Filers, Quantum SNAP servers, Foundry BigIron Switches/IOS, Cisco Routers/IOS, Sun SPARC E-series servers, IBM RS/6000 H70/H80 and x86 eServers, HP-PA E/J/K/N-class servers, and x86/EM64T architecture.

*Programming Languages:* Perl, PHP, Tcl/Tk, HTML/CSS, and Unix Shell. Object-Oriented Programming in C/C++ and Java, Javascript, SQL, VAX/VMS Assembly, Pascal, Basic. TCP/IP, 802.11, IPX and SNA protocols.

*Software:* Security (OpenSSH, OpenSSL, SASL, Kerberos v5, Tripwire, IPTables, NAT, ipf, Netscape/RedHat Certificate Management Server), e-Mail (IMAP, POP, Sendmail, Postfix, Spamassassin, various milters), File and Print (Samba, Netatalk, LPRng, CUPS), Web (Apache, Netscape Enterprise Server, Real Audio, Bind DNS, NTP, Handles), Database (MySQL, PostgreSQL, BerkeleyDB), LAN (NIS, NFS, LDAP, Netscape Directory Server, OpenAFS, Hylafax, Amanda, Veritas NetBackup), Host (LVM, VxVM, RAID), and Network monitoring (Netsaint/Nagios, Big Brother, MRTG, RRDtool).

### **Special Projects:**

- Presented "Integrating Linux and Open Source Applications in the Corporate Enterprise" at the March 2001 Association of Information Technology Professionals (AITP) conference.
- Built a profitable wireless broadband ISP covering nearly 100 square miles from the ground up using consumer-grade wireless networking equipment.
- Integrated RFID, GPS, and GPRS systems and designed a SOAP API, database schema, and HTTP front-end to create a database-driven map-based product shipment tracking application.

### **Experience:**

**July 2002 - Present; America Online**  
**Senior Systems Administrator**



- Design, implement, and manage a fully redundant, globally distributed, mission critical Kerberos, RADIUS, and LDAP authentication infrastructure capable of supporting 25,000 systems.
- Lead Architect for an internal authorization infrastructure capable of supporting 25,000 systems. Design required an iterative software development methodology and seamless migration from an existing system.
- Write tools in Perl and shell to automate tasks, ensure critical uptime of processes, and provide PCI/SOX auditing compliance. Design infrastructure to automate server installations. Design internal websites.
- Gather requirements and migrate numerous servers and applications from Solaris, HP-UX, IRIX, and OSF/1 to Linux. Support internal customer production processes. Manage day-to-day administration of 350 Red Hat Linux, Solaris, and HP-UX servers and Veritas volume management of EMC Clariion and STK 91xx-series fibre-attached storage.

**January 2001 – July 2002 U.S. Linux Networks, LLC**  
**Principal/Lead Architect**



- Architect, deploy, and support a multi-megabit wireless broadband data service (MMDS) WAN covering nearly 100 square miles using affordable, consumer-grade wireless networking equipment.
- Lead a small team to integrate a radio frequency identification (RFID) tracking system with a global positioning (GPS) and wireless phone (GPRS) system and SOAP-based automated processes for database-driven map-based global product shipment and tracking.

- Provide mission critical 24x7 server support for numerous Open Source applications and Linux, Solaris, and HP-UX systems. Deploy, configure, secure, and maintain Sendmail, IMAP, Apache, Samba, LPRng, Amanda, OpenLDAP, Bind DNS, NIS, NFS, NTP, MRTG, NetSaint, and Hylafax on OpenBSD, FreeBSD, and Linux servers. Natively package applications on Linux, Solaris, and HP-UX. Patch, tune, and compile kernels, RAID, and LVM. Document system configurations and changes.
- Instruct and prepare students for the Red Hat Certified Technician (RHCT) Exam.
- Develop PHP/Perl/MySQL-based secure authenticated public web sites and administrative interfaces.
- Design and deploy an LDAP-based authentication and authorization schema for use with Linux and FreeBSD servers via nss\_ldap and pam\_ldap.
- Manage Foundry BigIron switches, NetApp filers, and Quantum SNAP servers.
- Negotiate contracts, provide sales support, write service agreements, manage contractors, payroll, and billing.

**January 2000 - February 2001; Winstar Communications  
Enterprise Systems Architect**



- Deploy Samba and LPRng file and print servers. Automate system management, patching, and monitoring with Shell and Perl scripts.
- Write deployment plans for NT-to-NIS domain synchronization and Samba file and print server deployments. Issue system, software, and network design and procurement recommendations, and work with different divisions to integrate existing hardware and software.
- Configure and compare various e-mail server applications, including Lotus Domino, HP Openmail, Netscape SuiteSpot, Sendmail, CommuniGate Pro, and Microsoft Exchange under HP-UX 11, IBM AIX, Sun Solaris, Intel x86 Red Hat Linux, and Microsoft Windows.
- Develop a web management portal to an LDAP-based company directory.
- ISP security incident response, post-intrusion detection, damage control and assessment when necessary. Develop intrusion analysis software.

**June 1999 - January 2000; Lockheed Martin  
Applications Software Engineer**



- Set up and maintain computer accounts, install hardware and software under Windows NT 4.0, and perform troubleshooting of hardware and software systems. Assist in Novell-to-NT Authenticated workstation conversions. Automate systems tasks and login scripts. Develop repeatable methodology for systems deployment.

**December 1998 - February 1999; Enoch Pratt Free Library  
Assistant Webmaster**



- Contract position to design the *Exploration Center at Port Discovery* children's web site. Design a Perl-based search engine for the web site. Administer Solaris and Netscape Enterprise Web Servers. Configure Real Audio/Real Video on-demand streaming.

**May 1998 - June 1999; University of Maryland Baltimore County Student Media  
System Administrator**



- Convert Novell file server to Linux, utilizing Samba, Netatalk, and LPD.
- Administer Linux servers and Windows 95 desktops.

**Education:**

- Bachelor of Science, Computer Science, University of Maryland Baltimore County; May 1999.
- Red Hat Certified Engineer (RHCE) on Red Hat Enterprise Linux 3.0 (2004)
- Red Hat Certified Technician (RHCT) on Red Hat Enterprise Linux 3.0 (2004)
- Microsoft Certified Professional (Windows NT 4.0 and Windows 2000)
- O'Reilly Perl Conference 2000, O'Reilly Open Source Conference 2005
- AIX for Solaris System Administrators training
- Brainbench Certified Linux Systems Administrator

