

# Allen J. "Joey" Kelly Jr.

## Senior Linux System Engineer/Developer

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## Summary

### Well-rounded Linux system engineer/administrator/developer with 25+ years' experience

\* Skilled in Linux and BSD system administration, patching, software development, DB design, VoIP and traditional telephony, networking, automation, DNS, security, R&D, root cause analysis, mentoring, lecturing and user support.

## Technical Expertise

- \* **Operating Systems:** Linux (Red Hat (RHEL), CentOS, SuSE, Debian, Ubuntu, Slackware, Mandrake/Mandriva, Arch), UNIX (Solaris/OpenIndiana, FreeBSD, NetBSD, OpenBSD), Windows, DOS, OS/2, Cisco IOS
- \* **Languages:** Perl, PHP, SQL (MySQL), HTML, CSS, Javascript & AJAX, UNIX shell scripting (Bash), Pascal, Fortran.
- \* **Services & Applications:** Email stack (Sendmail, Postfix, Postgrey, Amavis-new, RBLs, Spamassassin, Clamav, Procmal, Dovecot, Squirrelmail, various malware/spam plugins, DKIM), LAMP, DHCPD, BIND (DNSSEC, RPZ, TSIG), Nagios, backups (Rsync & cron with snapshots), Apache, Proftpd, Samba, Squid and SquidGuard, Asterisk (with AGI scripting), Hylafax, OpenVPN, WireGuard VPN, firewalling (iptables & ipfilter), FreeRADIUS, tftpd/PXE, virtualization (VMware, Proxmox, VirtualBox, KVM), automation (Puppet, Ansible, Perl and shell scripting, REST and arbitrary LAMP-based web services).
- \* **Electronics:** Component-level troubleshooting. Knowledge of video and audio circuitry. Knowledge of electro-mechanical systems.

## Experience

### FlockBox Advanced Networking and Design (<https://flockbox.net/>) - New Orleans, La. (8/2023 - present)

- \* Owner.
- \* Founded second company offering Linux, programming, security and Asterisk/VoIP consulting services.
- \* Company was founded primarily as a vehicle to market **Hawk CVE Scanner**, an IoT-based security vulnerability scanner (researched and designed while employed freelance).

### SLK Software (<https://slksoftware.com>) - Cincinnati, OH (2/15/202025 – present)

- \* DDI (DNS,DHCP and IPAM) Architect
- \* Placed to QTS Data Centers for internal company-wide DDI redesign. Overarching project goal was to extricate corporate DNS data from incumbent BlueCat infrastructure.
- \* Attended planning meetings for all facets of DDI architectural design. Was able to offer input and insights while drawing on my understanding of QTS networks and DNS, having formerly served as DNS product owner.
- \* Participated in all lab working sessions to evaluate BlueCat, InfoBlox and EfficientIP as migration path and to discover and test all relevant DDI configurations. InfoBlox was eventually chosen by the engineering and architecture team and QTS management to succeed the incumbent BlueCat installation.
- \* Assisted SLK Lead Architect as needed.
- \* Transcribed meetings and extracted relevant data for inclusion in project documentation.
- \* Wrote DNS validation scripts for use in data migration and validation tests, in Perl.

### Freelance IT – New Orleans, La (6/2019 - present)

- \* Offered services to local businesses on 1099 basis.
- \* Wrote inventory/order-tracking LAMP software for local produce broker, replacing antiquated MS Access application.
- \* Installed and maintained in-house virtual server farm for security and safety firm. Set up Nagios monitoring for racked servers and all endpoints in the field. Did R&D for audio, video and telephony for future product offerings. Wrote other incidental software.

- \* Did field work for local IT services company.
- \* Researched and designed IoT-based security vulnerability scanner, similar to Nessus. Product ready to come to market.

**General Datatech** (<https://www.gdt.com>) – Duluth, Ga. (9/2018 – 6/2019)

- \* Senior Linux Engineer
- \* DNS product owner
- \* Managed Services unit purchased from **QTS Data Centers** in 2018.
- \* Wrote several Perl applications for data acquisition, conversion and presentation.
- \* Handled DNS escalations.
- \* Wrote Perl/MySQL application to verify over 1,000 DNS domains and all associated records in preparation for migration from QTS servers.
- \* Designed BIND cluster to host migrated domains.
- \* Set up DNSSEC and wrote automation and monitoring scripts.
- \* Was assigned as dedicated 24/7/365 Linux support for very large global ecommerce vendor.
- \* Performed blind audit of all equipment in data center cage owned by ecommerce customer and reconciled with existing asset lists and colocation contracts.
- \* Worked with e-commerce customer and monitoring vendor to place all servers into monitoring system.

**QTS Data Centers** (<https://www.qtsdatacenters.com>) – Suwanee, Ga. (8/2017 – 9/2018)

- \* Senior Linux Engineer
- \* DNS product owner
- \* Handled all DNS escalations from operations personnel
- \* Designed and implemented custom DNS solutions for customers.
- \* Extracted all DNS data from legacy DNS systems for import into BIND.
- \* Migrated SMTP cluster to new hardware and latest CentOS operating system.
- \* Migrated in-house public DNS resolver cluster to new hardware and latest CentOS operating system.
- \* Worked as part of tier-4 Linux support team.
- \* Participated in on-call rotation.
- \* Taught technical classes to junior system administrators.
- \* Wrote software and tools using Perl.
- \* Build-out of lab environment for Ansible development and training.
- \* Dedicated 24/7/365 Linux support for very large global ecommerce vendor.

**Synergis** (<https://www.synergishr.com>) – Alpharetta, Ga. (2/2017 - 8/2017)

- \* Senior Linux Engineer
- \* Contracted to **QTS Data Centers**, Suwanee, Ga. - **hired as full-time QTS employee, 8/2017.**

**Latitude 36** (<http://lat36.com>) - Franklin, Tn. (5/2016 - 9/2016)

- \* Systems Engineer
- \* Contracted to **Rackspace**, San Antonio, Tx.
- \* Worked on PCI-driven rewrite and additions to large in-house LAMP (Perl) application.
- \* Fixed bugs, performed code review and wrote documentation for application handling customer registrations in Red Hat Satellite 5. Translated API calls from XML-RPC (RH Satellite 5) to REST architecture (RH Satellite 6), and began refactoring Perl scripts for same.
- \* Participated in code approvals process in git environment.
- \* Performed PCI evidence-gathering on various Linux servers, as requested by PCI remediation/response project manager.

**Softpath System LLC** (<http://www.softpath.net>) - Little Rock, Ar. (8/2015 - 2/2016)

- \* DIS Linux DNS Administrator (DBA3 SC3).
- \* Seconded to **DIS, State of Arkansas**, via **Computer Aid, Inc.**
- \* Worked on project to upgrade, replace and reconfigure all servers in State of Arkansas DNS infrastructure.
- \* Set up lab space with representative hosts matching production server environment.
- \* Reverse-engineered orphaned load-balanced BIND cluster, and wrote disaster recovery documentation for same.
- \* Compiled custom RPM for RedHat 7 from latest ISC BIND sources, to take advantage of enhanced RPZ functionality.

- \* Configured Response Policy Zones for BIND and wrote Perl automation scripts for same.
- \* Wrote Ansible scripts and associated Perl and bash helper scripts to automate compiling, installation and configuration of DSC (DNS Statistics Collector).

**CenturyLink** (<http://centurylink.com>) - Monroe, La. (10/2014 - 6/2015)

- \* Senior Linux Engineer.
- \* Hired as Perl developer and system administrator supporting customer-facing team handling email abuse, malware infections and other AUP violations for major global ISP.
- \* Wrote various scripts to automate the processing of alerts received by third-party vendors.
- \* Evaluated, installed and supported issue-tracking software.
- \* Participated in on-call rotation.
- \* Selected and ordered all servers, equipment and hardware for small environment in Monroe. Installed all equipment and worked with peers and on-site NOC manager to complete and hand over turnkey environment.
- \* Transferred to PCI team. Responsible for remediation of vulnerabilities in secure Avaya call-handling environment found via Nessus scan on quarterly basis.
- \* Wrote Perl import scripts and associated LAMP application to parse Nessus scan data and track progress of vulnerability remediation.
- \* Worked with peers to test remediation in lab environment and coordinated remediation in production once approvals process complete.
- \* Performed remediation on lab and production Linux servers as needed.
- \* Worked with asset owners to schedule patching and other maintenance.
- \* Coordinated with Corporate Security and PCI team members to drive compliance with PCI DSS standards document.

**AlertLogic** (<http://alertlogic.com>) - Houston, Tx. (4/2014 - 10/2014)

- \* Appliance Support Technician.
- \* Performed alert-driven Linux operating system and application support in 24/7 team environment.
- \* Took ownership of problems and worked them to completion.
- \* Wrote Perl scripts to automate portions of various tasks associated with server remediation.

**KellyNet Computer Services** (<http://kellynet.org>) - New Orleans, La. (9/2003 - 12/2014)

- \* Owner.
- \* Founded company offering Linux, programming and Asterisk/VoIP consulting services.
- \* Scripted automated incremental local and remote backups with cron and rsync.
- \* LAMP scripting with Perl and PHP.
- \* Installed and maintained several Asterisk installations. Wrote dialplans, plus Perl AGI scripts where appropriate.
- \* Wrote numerous Perl and shell scripts for automation and other tasks.
- \* Replaced or augmented windows servers and applications whenever possible using Samba and open-source applications.
- \* Installed, configured and maintained Sendmail, full email stacks (Postfix, Dovecot, Squirrelmail, Amavis-new, Spamassassin, ClamAV, Postgrey and procmail), Apache, BIND, Squid and other network daemons.
- \* Set up firewalls using iptables. Ran Nagios, chkrootkit, logwatch and other security and host monitoring tools. Upgraded all servers weekly to latest patch levels. Stayed abreast of relevant Linux and open source application security issues. Proactively secured hosts and servers. Utilized defense-in-depth wherever possible and/or practical.
- \* Troubleshooted various network issues and outages.
- \* Performed network security audits, offered recommendations and remediation services.
- \* Ran, terminated and tested CAT5 data and voice cables in numerous office buildings and suites near New Orleans.
- \* Quoted large construction wiring jobs and managed labor crews to complete work on bids won.
- \* Maintained Windows desktops and servers.
- \* Advised clients regarding various technological issues.
- \* Managed part-time and temporary staff hired to complete occasional projects.

**Mid-South Technologies** (<http://mst.us.com>) - Lockport, La. (11/2010 - 6/2012)

- \* Linux system administrator, Perl programmer, VoIP administrator, Sharepoint developer.
- \* Wrote back-end configuration, automation and data reporting scripts using Perl, PHP and MySQL for AegisLINK shipboard multi-link router/content filter, under contract to Seacor Marine.
- \* Assisted web developer with algorithm development in PHP and Actionscript.

- \* Created InfoPath form for Seacor safety department for crewmember PAUSE task observation reporting. Form was emailed to Linux server for processing. Wrote Perl utilities to strip and save email attachments, parse InfoPath XML, and craft new XML documents for submission to Rincon database for later business statistical analysis.
- \* Provided phone, email and hardware support for routers and other connectivity issues aboard vessels, to crew, captains and IT technicians. Coordinated support with satellite Internet providers to determine and rectify bandwidth issues.
- \* Remotely administered 70+ FreeBSD-based routers via ssh and limited GUI.
- \* Set up OpenVPN to reach routers behind CDMA or other firewalled network connections.

**Global Resources** (<http://gblbresources.com>) - New Orleans, La. (1/2010 - 1/2011)

- \* PC technician, contracted to Insight.
- \* On-call break/fix, installation and asset refresh of PCs, servers and Cisco switches for Chase and Regions banks.

**Getronics** (<http://www.getronics.com>) - New Orleans, La. (04/2006 - 05/2007)

- \* Linux System Administrator, contracted to Shell Exploration and Production (SEPCO).
- \* Linux/Solaris Desktop support in an ITIL and managed root-access environment.
- \* Wrote password aging script to query LDAP and alert users of impending password expiration via email using Perl.
- \* Wrote Perl utility to scan and report compliance of RedHat hosts with baseline security profile.
- \* Worked as member of team for campus-wide UNIX (Sun Solaris) to Linux (Red Hat) workstation migration project.

**Gulf South Internet Services** (<http://www.gs.net>) - New Orleans, La. (04/2002 - 08/2005)

- \* Relief Support Technician.
- \* ISP helpdesk.
- \* Fielded incoming phone calls from DSL and dialup customers during weekend and holiday shifts.
- \* Assisted users with random connectivity and service issues.
- \* Insured server uptime and took appropriate actions during unplanned outages.

**Morris Bart PLC** (<http://www.morrisbart.com>) - New Orleans, La. (4/2002 - 1/2003)

- \* Assistant Network Administrator.
- \* Admin and help desk for Windows/Novell network.
- \* Performed first-level user and PC hardware support (Win2k and Novell).
- \* Maintained user accounts in Windows 2000 and Novell.
- \* Administered several Linux servers.
- \* Set up squid web cache with ACLs and firewall on Linux edge device.
- \* Migrated file server from Windows to Linux using samba.
- \* Installed shelving and relocated servers into new server room.
- \* Installed and configured wireless networking gear and associated monitoring software.
- \* Interfaced with bandwidth providers and networking hardware subcontractors.

**PatientCareRX.com, Inc.** (<http://www.patientcarerx.com>) - New Orleans, La. (4/2001 - 4/2002)

- \* Network Administrator.
- \* Performed day-to-day server maintenance and support for Windows and Linux workstations.
- \* Performed remote administration tasks.
- \* Provided support to users and programmers.
- \* Installed and configured Linux server providing web, email, DNS, VPN, and database services, and Linux router/firewall for network access and site security.

**MasTec North America, Inc.** (<http://mastec.com>) - New Orleans, La. (2/2001 - 5/2001)

- \* Cable Modem Installer
- \* Installed and configured router/firewall and existing switch in a local office building, providing Internet access for several suites.

**Fastband Internet Services** - New Orleans, La. (5/2000 - 10/2000)

- \* Support Technician, ISP helpdesk.
- \* Worked as part of phone support team; responded to and rectified customer's dial-up and related difficulties.
- \* Assisted network administrator with various tasks.
- \* Performed maintenance on corporate office PCs.

**Education**

**Louisiana State University** - Baton Rouge, La. (1981-1988)

- \* Electrical Engineering major. Senior standing.