

Olegario Lopez Craig

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SUMMARY 19 years of professional IT experience: *NIX administration; distributed systems architecture & operation; design, administration, & security of TCP/IP networks; web/cloud operations; and troubleshooting of complex systems. Exceptional analysis, diagnostic, scripting, communication, and customer-service skills. Integrates new information quickly.

OBJECTIVE Technical leadership role for a Boulder organization that rewards critical thinking and creative solutions within an institutional culture supportive of challenge and growth.

EXPERIENCE

Symplified, Inc., Boulder, CO

Principal Systems Architect (2012 – 2014)

Operations Manager (2009 – 2012)

- Screened, hired, trained, and led a team of highly-technical personnel to support Symplified and OEM partners in deployment planning, installation, monitoring, and maintenance of IAM/SSO (SAML, optional proxy) solution comprising SaaS/on-premise/Cloud distributed architecture. Several generations of management referred to the group as the “best Ops team in the business”.
- Designed, deployed, and automated performance/scalability lab for Symplified Identity Router (“IdR”) appliances in both solo and clustered (HA/HP) operation using EC2, VPC, and autoscaling backend instances. Lab results allowed me to identify and implement deployment/configuration changes to the IdR's intrasystem services architecture, realizing a 25x performance increase on critical metrics with no changes to application code or virtualization/resource parameters. Was able to design and test configurations supporting in excess of 75,000 concurrent active user sessions.
- Researched and prototyped architectures and supporting shellcode for various complex deployment modes and features of Symplified's IAM/SSO solution, including HA/GDHA, OEM deployment of central SaaS components and IdRs, appliance console configuration, and IdR disk encryption.
- Network design, monitoring, and security architecture for production and staging instances of Singlepoint Studio, the flagship product's central command/control stack.
- Developed systems, operational procedures and automation tooling to coordinate OS and platform deployment, privileged access authorization, maintenance, upgrade/rollback, and monitoring across a fleet of hundreds of Linux-based IdR appliances located in customer and cloud datacenters spanning 5 continents and 11 timezones. Maintained 99.95% uptime SLA for appliances in the field.
- Custom toolsmith for integration, automation, alerting, maintenance, data extraction/analysis, and ad-hoc scripts/applications used by Operations, Support, Professional Services, and Development.
- Repurposed disparate surplus hardware to build fault-tolerant private cloud infrastructure using Apache Cloudstack on top of Ceph, Linux KVM and VMWare.
- Developed sandboxed lab templates to facilitate end-to-end defect and use-case reproduction by QA, Support, and Professional Services, where each KVM lab contained a replica of Symplified's central multi-system command/control platform, an Internet connectivity simulator, and sample multi-zone customer networks including NATted datacenter and office subnets complete with typical endpoints, systems and services.
- “Subject Matter Expert”: knowledge resource and mentor for developers, QA, Support, Sales Engineering, and Operations on LAN/WAN routing and troubleshooting, cloud automation & deployment, low-level protocol interaction, packet and flow analysis, shells and scripting, and Linux OS.
- Relocated product's SaaS cluster from managed hosting to consolidated colocation facility, achieving increased bandwidth and better service along with an annual cost savings of \$198,000.

Latis Networks (d/b/a StillSecure), Superior, CO
Team Lead, Customer Support (2006 – 2008)
Security Engineer (2005 – 2006)

- Technical lead on deployment projects for StillSecure's largest customers, including Federal cabinet-level departments and Fortune 500 companies. Worked closely with customers' technical and managerial staff to integrate StillSecure solutions into complex multi-tier production intranets serving over 20,000 endpoints.
- Screened, hired, trained, mentored, and supervised a team of engineers to support StillSecure's customers and OEM partners in deployment planning, installation, and ongoing maintenance of industry-leading network security/infrastructure software (network access control, network-based intrusion detection/prevention, & host vulnerability discovery/management.) Quality of support was consistently praised by customers and was named in post-decision surveys as a major factor in sales renewals. Alumni from my group subsequently went on to lead both the Professional Services and Sales Engineering teams.
- Identified, triaged, replicated, tracked, & verified resolution of defects and enhancements across several releases of each StillSecure product. Collaborated with Development, Design, and QA leads to prioritize bugs & features according to customer impact.
- Responsible for final signoff & post-QA testing/verification of patches and full releases.
- Trained new hires in Development, QA, and Support on StillSecure products; wrote and presented training materials for OEM partners.
- Implemented and maintained customized ticket system to handle customer support requests, coordinate and track response across internal groups, and monitor service level touchpoints.
- Wrote requirements, guidelines, and proof-of-concept code for development of customer-support functionality within StillSecure's products and online presence.
- First dedicated customer support engineer for growing developer of security infrastructure software. Reorganized support procedures and call flow to minimize developer interruptions.
- Email, phone, and onsite customer support. Developed, documented, & tested workarounds to mitigate or avoid product bugs, deficiencies, and performance losses; fed customer experiences and insight back into the software design/development process.
- “Subject Matter Expert”: knowledge resource for QA, developers, and support on LAN troubleshooting, low-level protocol interaction, packet and flow analysis, shell scripting, and standard Linux OS tools.
- Honored with company-wide “Most Valuable Player/People's Choice” award, 12/2006.

CreekPath Systems, Boulder, CO
Software Quality Analyst (2004 – 2005)

- Systems engineering of design issues/requirements for linux platform elements of SRM suite. My analysis of SSL-related design flaws within intra-suite messaging drove a product refactor which fixed vulnerabilities affecting multiple components on 6 OS platforms.
- Wrote and presented technical training sessions for software developers on security practices and SSL implementation.
- Administration and change control of Linux and Solaris hosts in highly mutable development/test lab.
- “Subject Matter Expert”: knowledge resource for QA and developers on IP networking, network & host security, & linux platforms.
- Planned and executed consolidation/cutover of critical-path Oracle databases from x86/Windows platform to RedHat ES on AMD64, achieving significantly increased reliability and better than 75% performance gain while reducing operating costs by 50%.

- Designed test cases and environments for components of flagship SAN SRM software suite, focusing on robustness and scalability.
- Triaged, reproduced, tracked, & verified defects/resolution across several releases of industry-leading storage management software.
- Designed and scripted automation of test processes & lab management.

CS Computing Facility, Dept. of Computer Science, Univ. of Massachusetts, Amherst, MA
Software Specialist II (2000 – 2004)
Software Specialist (1997 – 2000)
Associate Software Specialist (1995 – 1997)

- Researched, proposed, developed, installed, secured and maintained system software, utilities, applications and enhancements to support complex academic, research and administrative computing needs of Computer Science faculty, staff and graduate students.
- Developed and maintained highly-available SMTP gateway server that handled an average of 30,000 emails daily while blocking over 10,000 viruses and 8,000 SPAM instances with false-positive rates less than .001%; the prototype system gracefully handled the notorious VBS/Loveletter worm pandemic, which took down every other mailserver on campus.
- Third-tier UNIX technical support; “Linux guru”; lead email, web, database, and USENet admin; campus-wide SGI liaison.
- Developed forward-looking Linux strategy and specific server/environment cutover plans in response to changing industry landscape.
- Responsible for secure incident response and forensics; developed and implemented proactive security practices and strategies. Planned and supervised Network IDS deployment and customization. Proposed, developed and refined custom NAT/firewalls to protect research groups from impinging on each others' activities while still allowing complex interaction with shared core servers.
- Prepared and led training, education and outreach programs for department faculty and staff.
- Trained, mentored, and supervised junior CSCF staff, both students and full-time employees.
- Built and tuned scalable servers for email, web, storage, backup, NAC, and miscellaneous applications to serve mission-critical departmental needs using COTS components.
- Performance tuning of IP services and protocols on 9 class-C IPv4 slices comprising 5 CIDR subnets.
- Overhauled site-wide email strategy and implementations to deal with SPAM, virus, and open-relay risks for over 400 multiuser SMTP-serving machines; developed and implemented SSL-secured IMAP/POP infrastructure to allow authenticated mail relay from offsite clients. Centralized disparate SMTP policy implementation, unifying sendmail *cf* creation across 7 different UNIX platforms and over 30 discrete research groups.
- Created automatic “clean-slate” system-image-restoration setup for workstations in undergrad lab with custom Kickstart and DHCP instances.
- Spearheaded top-down group website redesign, focusing on customer service and useability.
- Planned & oversaw service transitions from obsolescent enterprise hardware/software to inexpensive Linux/x86 and open-source solutions.
- Helped coordinate and implement transition from 4 IPv4 Class-C subnets to 9 class-C CIDR slices.
- Helped relocate 400-person academic department to new building, assisting with service cutovers, facilities planning, and capacity buildout.
- Webserver and USEnet installation and administration.
- Wrote Acceptable Use and Code of Conduct policies for undergraduate labs and sensitive-area staff.
- Developed and automated backup/recovery procedures for newly-popular Linux workstations.

- SKILLS**
- Extensive experience with Linux and UNIX servers in wildly heterogenous network environments
 - Custom configuration, automation, administration, tuning, hardening, and troubleshooting of Sendmail, Apache, DNS/BIND, SSH, FTP, SSL, DHCP, LDAP, NIS, Samba, NFS, RPM, MIMEDefang, SpamAssassin, netfilter/iptables, USEnet, VPN, NAT/DNAT/SNAT, IMAP/POP, IDS, RAID (SW & HW) and HA/HP Linux clustering
 - Scripting: in Perl, (ba)sh, csh, ksh, Expect, Tcl/Tk, awk, sed, some python; others as needed
 - Programming: in C, Perl, Pascal, ADA, Lisp; others as needed
 - Operating systems: Linux, Solaris, IRIX, OSF1/True64, AIX, MacOS X, OpenBSD, FreeBSD, Windows (9x through XP), VMS/DCE, IOS
 - Hardware: x86, x86-64, Cisco 2xxx/3xxx/6xxx routing & switching, Sparc/UltraSparc, SGI Challenge/Indigo/Onyx, Extreme Networks, StorageWorks, SnapServer
 - Networking: Cisco IOS routing/switching, NIDS, intimate familiarity with Linux bridging and firewalling code, 802.11a/b/g WiFi, Ethernet, WEP/WPA/802.1x, 802.1q
 - Storage: FibreChannel SAN configuration with Brocade, McData, Cisco, & EMC switches; Linux/Solaris HBA troubleshooting; SRM with CreekPath Suite & vendor toolkits; Veritas
 - Software and toolsets: gcc, Make, gdb, Emacs, vi, m4, iptables, fwbuilder, tcpdump, netcat, OpenSSH, Jetty, Ethereal/Wireshark, Sendmail, MIMEDefang, SpamAssassin, ClamAV, Apache HTTPD & Tomcat, WebLogic, OpenSSL, Request Tracker/RT, RT FAQ Manager, bugzilla, ISC BIND, OpenLDAP, Snort, stunnel, PostgreSQL, MySQL, Berkeley DB, Oracle, Kickstart, Eclipse, Firefox, Nagios, OpenOffice, Fedora Core, Red Hat EL, CentOS, Debian, Gentoo linux, LVM/LVM2/EVMS, X11, Cygwin, RADIUS, NetReg, git, CVS, Subversion, StarTeam, GitHub Enterprise, Snort, Mantis, XML, OpenVPN, tc/qdisc, NISTnet, VMWare, KVM, Xen, CloudStack, ceph, glusterFS, iSCSI
 - Flawless written English; excellent verbal and presentation skills
 - Creative problem-solver; fast, independent self-educator

INTERESTS, ACHIEVEMENTS, OTHER EXPERIENCE

- Constitutional and telecommunications law; expert witness (defense) in *Universal v. Reimerdes, et al*, 111 F.Supp.2d 294 SDNY2000 (DMCA first-impression case; “NY DeCSS trial” aka “MPAA v 2600”)
- Yondan, Kodokan Goju Ryu karate; head instructor, Front Range Kodokan
- Journeyman rigger, stagehand; IATSE 232
- NAUI divemaster candidate
- Conversational Spanish
- Lab manager; University Computing Services, UMass (1989-1991)
- Instructor: Self-Defense, Karate I/II; GPE Dept., UMass (1990-1995)
- Teaching assistant; Sport SCUBA, Project D.E.E.P./UMass (1994-2002)
- Assistant manager, Jonathan Reid LTD, Hadley, MA 01035 (1992-1995)

EDUCATION

University of Massachusetts – Communication
Concentration in Computer and Information Science