C.J. COLLIER

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Software Development	Systems Administration	Network Operations

Software Development

- Project Planning using GNOME Planner
- Agile development using XP and Scrum
- Test-Driven Development using
     Test::More,
     Test::WWW::Mechanize,
     Selenium, Karma,
     Travis-CI, Jasmine,
     CppUnit, NUnit,
     MSTest, Test::Unit
- Coding style enforcement with
     lint, cpplint, jslint,
     perltidy
- Code quality enforcement with Perl::Critic
- Continuous Integration using integrity, Jenkins
- Perl, PHP, bash, Python
- Mono, .NET, Java
- Android SDK, NDK, ADB
- XML, HTML
- CSS2,CSS3
- JavaScript, JQuery, AJAX, AngularJS
- WML/WAP
- C, C++, C#
- visual studio, eclipse, monodevelop
- glade, gtk+, gtk#
- Accessibility
- OpenGL
- i386, amd64, ARM, Atom, MIPS
- gerrit, git, svn, cvs, p4, sd, hg, rcs, bk

Systems Administration

- Deployment automation and configuration management with Chef, Packer, Puppet, Vagrant, Ansible
- MAC implementation and enforcement
- PKI
- MariaDB, MySQL, PostgreSQL, MS SQL Server, Oracle
- Docker, Xen, QEMU/KVM, libvirt, Hyper-V, VMWare, OpenStack, ProxMox
- Linux {Ubuntu, Debian, Red Hat Enterprise, CentOS, Fedora, Gentoo}, OpenSolaris, FreeBSD { 4.11-RELEASE, 6.3-RELEASE, 7.1-RELEASE, wheezy }
- Samba 3.5.21 / OpenLDAP 2.4.17
- DOS
- Windows {3.x, 9x, NT, XP, Vista, Seven, 8, 10, 11}
- Wordpress, Mediawiki
- sks, gpg/pgp, openldap, freeradius, freediameter, gssapi

Network Operations

- Authentication / Authorization
- policy compliance auditing
- Cryptography
- LDAP
- Kerberos
- X.509
- PPP, RADIUS
- Apache
- TCP/IP
- Cisco IOS, Catalys
- LLDP
- Squid, Varnish, memcache
- SNMP, MRTG, NAGIOS
- SIP, RTP, IAX2/Asterisk
- BIG-IP™ LTM, tmsh, iApp, iRule, iControl
- JUNOS, Juniper SRX

Work Experience

Open Source Community • Member • 2001 – Present

Software and systems design, development, and operations
Project Management, Package Maintainer, Volunteer Of All Trades

Contributions include:

MySQL

Various build tools improvements prior to cmake

Mono:

Microsoft Corporation:

Integration of Dynamic Language Runtime (DLR) with Debian
IronRuby 1.9
IronPython 2.6

Cocoa-sharp
Prebuild
gtkglarea-sharp

GNOME:

GIMPNet
GtkGLArea

Real Networks:

Helix

Open Connectivity Foundation:

CI management
IoTivity
AllJoyn Open Source Project

F5 Networks, Inc.:

NIST-NVD, an interface to the National Vulnerability Database
NIST-NVD-SQLite3, SQLite back end for NIST-NVD

Freenode:

Charter member, volunteer, mentor

Computational Biology Research Center:

Source code for WoLF PSORT II available at http://psort.hgc.jp/

Google, LLC:

google-auth-library-perl (in pre-release),
foundational work on building a well supported interface to GCP
using Perl

Collier Technologies LLC • Member • 2001 – Present

Software and systems design, development, and operations
Management, staffing, office administration and billing.

AS25819

Clients include:

LiquidWeb:

http://stormondemand.com

Doubleprime:

http://www.esteelauder.co.uk/
http://www.esteelauder.com.au/
http://www.clinique.com.au/

Cadmium Yellow Design:

http://www.makaturamurals.com/
http://www.billydavisfineart.com/
http://encserviceconcepts.com/

Computational Biology Research Center:

http://seq.cbrc.jp/
http://wolfpsort.org/

Amazon.com:

http://www.amazon.com/daily
http://www.target.com/
http://bombaycompany.com
http://store.nba.com/

F5 Networks, Inc.:

Silverline
RADIUS Deployment Guide

Google, LLC • 06/2019 - present • Senior Technical Solutions Engineer

Responsibilities

Tenured member of technical support staff. Primary support point of contact for two of Google Cloud Platform's
top 50 customers. Specialized in supporting GCP's big data products, especially the open source components of
Dataproc, but also including Big Query, Dataflow, Composer and Cloud Data Fusion.

Shiftboard, Inc. • 05/2018 - 06/2019 • Remote Software Developer

Responsibilities

Member of 5-person back-end software engineering team. Development of new features for cloud-based web
application. Implementation of fixes for any defects found in production. Interfaced with QA, DevOps and front-
end development teams for tasks related to validation, deployment and integration. API service implementation
and augmentation. Development of test framework for automated product verification. Platform includes HTML,
CSS, JavaScript, JSON-RPC API service, MySQL and PostgreSQL data storage and retrieval, CVS and XL data
loading and exportation.

The Linux Foundation • 02/2016 - 04/2018 • Release Engineer

Responsibilities

Represent The Linux Foundation (LF) at project forums, including Technical Steering Committee (TSC) meetings, development efforts and conferences.

Contribute and review patches to various git and gerrit repositories including those maintained and consumed by The LF's Collab Project IT (CPIT) team.

Develop and deploy Vagrant, Packer, Ansible and Docker system image generation tools.

Mentor new members of LF CPIT team, document best practices and develop standard operating procedures.

Co-maintain FD.io, Zephyr Project, All Seen Alliance, IoTivity request queues.

The Walt Disney Company • 11/2014 - 12/2015 • Senior Consultant

Software Development

Lead developer tasked with building a full stack, highly-scalable content distribution management portal. Requests from customers are queued for later processing by long-running daemon. Daemon asynchronously delegates customer requests to CDN providers such as Akamai, Limelight and Level3 via web APIs and monitors queues for completion. Upon completion, users are notified in web interface and via email. This project was planned using GNOME Planner. Development was done test-first using Test::More.

Patching, distribution and management of an intellectual property registry. Engaged with developers to recommend patterns which would mesh well with the continuous integration server. Reviewed patches to product. Used test-kitchen, vagrant and docker to develop, exercise and maintained Chef packaging and deployment solution. Promoted packages which passed QA from development environment to staging and from staging environment to production.

Lead developer tasked with building a pricing calculator for internally-offered compute, storage and database services for comparison with AWS, Rackspace, Liquid Web, etc. Performed test-driven evelopment using Karma, Jasmine, NodeJS, AngularJS, PhantomJS, bower, yeoman, grunt, bootstrap, etc.

Operations

Monitored CDN request queue with senior colleague.

ZeroLag Communications, Inc. • 10/2013 - 07/2014 • Contract Engineer

Network Engineering

On small team responsible for operation of all networking equipment in ZeroLag data centers including routers, firewalls, switches, load balancers and VPN endpoints.

Software Development

Sole member of the Network Engineering team with a background in development of production enterprise software. Responsible for identification of repetitive work which could be automated, and subsequent automation of these tasks. Reducing workload of team by providing role-based web interface to management of common network engineering tasks.

Systems Administration

Responsible for deployment, maintenance and security of Gentoo Linux-based firewall and VPN fleet. Deployed and administered Debian GNU/Linux utility hosts for maintenance of Juniper firewall and VPN fleet.

CA Operative Personnel

Responsible for operation of x.509 Certification Authority including issuance of intermediate CAs, issuance of server & client certificates, personal identity verification, management and security of root CA. Operations

performed per 19.34 RCW.

Intel Labs • 07/2013 - 09/2013 • Senior Technical Consultant

Bare Metal Provisioning

Developed provisioning infrastructure for standing up arbitrarily large cluster environments. Proof of concept exercised on state of the art hardware in development, staging and production environments. All systems provisioned using this infrastructure make use of IPMI for console access and power management. Network hardware is managed using Software-Defined Networking patterns. Each node in the cluster is equipped with tiered storage and network hardware.

Provisioning profiles included:

- unmanaged Debian, Ubuntu, CentOS, RHEL
- puppet-managed Ubuntu, CentOS, RHEL
- Cobbler CMS
- Eucalyptus components
    - Cloud Controller
    - Cluster Controller
    - Storage Controller
    - Node Controller

Juniper Networks, Inc. • 03/2013 - 06/2013 • Technical Consultant

IT Operations

Managed the build and installation of winbind for legacy production FreeBSD platforms requiring authentication support from Microsoft Active Directory. The majority of these systems had uptime of over 1500 days and required a solution that would meet business needs without requiring changes to the running environment. Also documented the same for Debian-based hosts, but did not provide hands-on support to the user community at Juniper. Worked with senior unix administrators to ensure that windows-based authentication using kerberos, ldap and NTLM functioned at nominal levels. Held root and windows domain admin credentials to entire unix fleet and windows enterprise environment.

F5 Networks, Inc. • 11/2010 - 08/2012 • Project Management Engineer

New Technologies Research

Planned, designed and developed IT operational administration system with the research and development team at Seattle-based network appliance firm.

> BIGIP GTM, BIGIP LTM, embedded systems, Perl, AnyEvent, Virtualization, KVM, Qemu, libvirt, Debian, DNS, MYSQL, WordPress, HTML, TCL, Cisco IOS, x.509, PGP, C, JSON, JavaScript, SVN

Researched platform for optimization of wide area wireless networks and developed an iApp which eases the deployment of these systems.

> Voice over IP, SIP, UNIStim, Asterisk, RSTP, RTP, 4G/LTE, IPv6, BIND/DNS, BIGIP GTM, BIGIP LTM, Cisco IOS, x.509, tcpdump, wireshark, tftp, ISC DHCPD, PXE, Network Address Translation,

Created Deployment Guide for load balancing of the RADIUS AAA protocol using BIGIP devices.

> FreeRADIUS, Debian, 802.1x, ppp, EAP, CHAP, tcpdump, wireshark, BIGIP LTM, iApp, Cisco IOS

LiquidWeb Inc. • 9/2009 - 9/2010 • Consultant

Software Development Engineer

Creation and maintnenance of Storm on Demand cloud hosting infrastructure. Projects include web-based DNS administration interface, creation of Debian and Ubuntu server image templates, packaging of internal software for Debian and Ubuntu and migration of provisioning system from Xen to KVM/libvirt. Skills used in this role

include Perl, HTML::Mason, HTML, JavaScript, JQuery, CSS, AJAX, JSON, git, gerrit, PostgreSQL, MySQL, Xen, KVM, Qemu, libvirt, CentOS, Debian, Ubuntu, SOAP, DNS, h.323, XMPP.

Double Prime Inc. • 03/2009 - 9/2009 • Consultant

Software Development Engineer

Creation and maintnenance of domestic and international e-commerce applications for Estee Lauder brands. Skills used in this role include Perl, Text::Template, HTML, JavaScript, JQuery, CSS, AJAX, RCS, Oracle, Solaris, CentOS, i18n, l10n.

Microsoft Corporation • 08/2008 - 03/2009 • Consultant

Technical Writer / Software Development Engineer in Test

Research, document and test existing functionality of GAPA host intrusion prevention system into upcoming product. Skills used in this role include Hyper-V, SQL Server, C#/.NET, wireshark, netmon.

Cardomain.com • 04/2008 - 08/2008 • Consultant

Software Development Engineer

Develop and recommend improvements for web infrastructure. Integrate the CarDomain brand and web presence into various social networking systems using web 2.0 tools, PHP, Perl and JQuery.

Amazon.com • 08/2007 – 03/2008

Software Development Engineer, Merchandising Applications

Maintain, support and develop content display infrastructure of retail web sites. The Merchandising Applications group (MA) is responsible for the prompt and accurate rendering of product data to an HTML format, consumable by all major web browsers. Our internal customers include the product group owners in all of Amazon's supported locales (.us, .jp, .uk, .de, .fr and .ca). Some of the most visible page types that MA owns include product detail (http://www.amazon.com/gp/dp/<ASIN>), category browse (http://www.amazon.com/gp/browse/?node=<category id>), and search (http://www.amazon.com/gp/search/?field-keywords=<keywords>).

Amazon.com • 07/2006 – 08/2007

Software Development Engineer, Amazon Daily

Support, maintain and improve the Amazon Daily mason component codebase. Tasks involve project planning, code review, unit testing, feature design and implementation and release deployment

MySQL, Inc. • 05/2005 – 06/2006

Support Manager, MaxDB

Provided support for MaxDB, MySQL's re-branded database, formerly known as SAPDB, formerly known as Adabas D. Worked with colleagues spread throughout the world, especially in Germany, Sweden, Finland and US.

Amazon.com • 08/2004 – 05/2005

Software Development Engineer

Maintained and developed display infrastructure of Amazon's ECS sites including The Bombay Company, Target and the NBA Store. Organized presentations to Amazon developers by industry leaders including Randal Schwartz, Patrick Galbraith and Jon Swartz. Taught Perl classes from introduction to intermediate for new recruits and those interested in learning the language.

Advanced Institute of Science and Technology's CBRC center • 11/2002 – 08/2004

Software Development & Design Lead

Software design and development of user interface (HTML, CSS, JavaScript), system administration of source code repositories (Linux, CVS), lead developer and designer of web interface to WoLF PSORT protein localization prediction algorithms (Perl, HTML::Mason, Linux, Apache, mod_perl), Consultant for visualization of biological data (OpenGL, GTKGLExt, gtk+, GNOME, Glade), English documentation author (English language, groff, HTML), software build and test director (autotools, C++, CppUnit)

More work experience available upon request.

Education

- 2009-2010: University of Washington, Computational Linguistics masters program
- 1999-2000: Olympic College, General studies with a focus on IT
- 1998-1999: Edmonds Community College, Running Start

Community activities

- 1994-present: member of the Linux Internet Support Cooperative (also known as LinPeople, OpenProjects and, most recently, Freenode)
- 2002,2018-present: member of Mensa
- 2001-present: member of various Open Source and Free Software development teams including Mono, GNOME, Perl6, IronRuby and SELinux
- 2003: Member of the Seattle Wireless Network and host to NodeViceroy
- 2004: Seattle Perl Users' Group (SPUG) organizer
- 2004-present: Events coordinator for the Scarlet & Zelda show
- 2009-present: Amateur radio operator KF7BMP
- 2010-2014: maintained a pool member of distributed PGP database
- 2011-2013: Volunteered, deployed and co-maintain compute cloud for University of Washington's Center for Information Assurance and Cybersecurity
- 2011-2012: Enlisted member of Washington State Guard
- 2011-2013: US Army Volunteer
- 2011: Member of the North American Network Operators Group (NANOG)
- 2010-2011, 2018-present: San Juan County Democrats: PCO, Secretary
- 2020-present: River Winds Band: Secretary

References

Rick Boucher (rboucher@sanjuanweb.com), Administrator, Orcas Online, Inc.

Jon Torrez (jon.torrez@gmail.com), Network Engineer

Bob Blair (massody@comcast.net), Project Management Engineer, F5 Networks, Inc.

Randal Schwartz (merlyn@stonehenge.com), Perl, Stonehenge Consulting

Brian Fey (feybrian@hotmail.com), Bosque Village

Paul Horton (horton-p@aist.go.jp), AIST (Computational Biology Research Center)

Interests and activities

Parenting, software development, human-to-human communication, wireless and wired network communication, system & cluster administration, operating systems, Free Software, Perl, network administration and management, blogging, learning new programming techniques, design patterns, human and computer languages

Additional Information available upon request.