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Summary of Qualifications

- Expertise in writing programs and libraries through the use of development tools, such as Xcode, GCC, autoconf, libtool, and automake.

- Solid understanding of Unix environments, such as Slackware Linux, FreeBSD, Solaris, and OS X.

- Experience in developing Unix daemons, porting POSIX libraries to iOS, and writing intricate iOS apps.

- Strong knowledge of LDAP design, including the deployment of Sun One Directory Server and OpenLDAP servers, the integration with applications, schema management, and application development.

Technical Expertise

Languages C, Objective-C, C++, Perl, PHP, Bash, JavaScript, SSI, M4, and XML

APIs OpenLDAP Library, MinGW, AppKit/Cocoa (OS X), UIKit/Cocoa (iPhone/iOS), GNU Libc, GNU Readline, Libtool's libltdl, Pthreads, Berkeley DB, SQLite, iODBC/unixODBC, and Syslog

Concepts MVC Design, Unix Daemons, Networks, Socket Programming (TCP and UDP), Portable Programming, CGI Programming, Cross-Compiling, Library Development, Perl Modules, Source Code Control/Revision Control, Change Management, Software Documentation, and Open Source Licensing

Protocols DNS, FTP, HTTP, HTTPS, IMAP, LDAP, NFS, NTP, SMTP, SNMP, OSPP, POP3, and SSH

Standards Single Unix Specification (SUSv3), GNU Coding Standards, and Apple's Human Interface Guidelines

Development Tools
Xcode, LLVM, GCC, GNU Make, GNU Libtool, GNULib, GNU Libc, Autoconf, Automake, CVS, Git, and Texinfo

Environments
Slackware Linux, FreeBSD, Solaris, Apple OS X, Windows (98, 2000, XP, Vista, 7), VirtualBox, FreeBSD Jails, and Linux LXC

Software ntpd, ProFTPd Apache, Lighttpd, Redmine, MediaWiki, Nagios, Sendmail, Mailman, Bind, SunOne Directory Server, OpenLDAP, OpenSSH, and MySQL

Professional Experience

Bindle Binaries
Anchorage, Alaska

Owner-Operator/Software Developer (2010 - present)

Primary responsibilities include writing software for the iPhone platform and Unix based platforms. Secondary responsibilities include coordinating work with clients to ensure project satisfaction.

- Designed and implemented an Objective-C framework for accessing LDAP directories from Mac OS X or iOS.
- Built and maintained a server environment to support business operations. The server environment utilizes a combination of Linux containers (LXC) hosted on local hardware and remote instances hosted with VPS providers.
- Designed and wrote Branches, an LDAP administrator for iOS. Branches parses a servers schema and uses the parsed schema to present intelligent options to users when modifying LDAP entries.
- Created a portable ODBC client using iODBC and unixODBC for POSIX environments such as OS X, Slackware Linux, and FreeBSD.
- Created iOSPorts project to port OpenSSL, Cyrus-SASL, OpenLDAP, and PCRE to iOS environment for the iPhone.
- Wrote a two-part article describing a method to port OpenLDAP to iOS.
- Developed an RPN calculator for the iPhone OS. The application makes use of the CoreGraphics framework to dynamically generate button images used in the calculator's GUI.
- Wrote a promotion iPhone application for Blogography. The application makes use of the CoreAnimation framework to provide animated backgrounds and menu transitions.
- Wrote an iPhone application which simulated a Magic 8 Ball. The application makes use of the accelerometer to determine if the device is shook or if the device is flipped upside down.

Alaska Communications Systems
Anchorage, Alaska

Acting IP Engineer II (2003 - 2010)

Primary responsibilities include maintaining SunOne Directory Servers, Apache servers, ProFTP servers, and legacy servers from acquired ISP. Secondary responsibilities include writing internal applications for the ISP business unit and other departments as required.

- Developed a modular system to act as a device manager for mobile devices for the ACS cellular network. The system uses information from the device and billing system to properly configure the device for its capabilities and service when an OTA request is initiated.
- Developed a client library for the Clam AntiVirus Daemon and used the library to create a ProFTPd module for scanning files uploaded by subscribers.

- Installed and maintained a Redmine ticketing system for tracking department projects and department escalations.
- Developed a web portal that allows staff to provision virtual domains and allows subscribers to self-manage users within their respective domains.
- Developed a session management system which authenticates and tracks subscribers. The system allows multiple web interfaces to share a single session identifier for a subscriber, thus eliminating the need for the subscriber to present credentials to each interface.
- Developed a provisioning system which allows multiple billing systems to provision services on shared LDAP entries. This system allows an individual subscriber to have one shared set of credentials for services managed managed by different billing systems.
- Wrote a library and client which implemented the Over-the-air Service Provisioning Protocol, a proprietary protocol developed by Logica intended to allow clients on TCP/IP networks to communicate with mobile phones. The client is used by an IVR to activate new mobile phones and update Preferred Roaming Lists (PRL) of existing mobile phones.
- Wrote miscellaneous web interfaces for managing MMS, WAP, and EVDO service provisioning.
- Wrote a library and utility that creates NAM data blocks for either IS-683-A or IS-683-C compatible mobile phones.
- Implemented and maintained a CVS server to manage software packages developed by IP Engineering.
- Migrated CVS repositories to Git repositories and used git-cvsserver to provide legacy CVS support.

Systems Administrator I (August 2001 - 2003)
Primary responsibilities included maintaining DNS servers, iPlanet Messaging Servers, iPlanet Directory Servers, Apache servers, ProFTP servers, and legacy servers from acquired ISP. Secondary responsibilities included writing simple utilities to assist support staff.

- Using Bind 9, designed a DNS infrastructure which implemented split views and split horizons.
- Developed Unix tools using Perl, Bash, and C to simplify server management and to assist technical support personnel.
- Developed multiple Perl CGI interfaces which provided staff with controlled access to LDAP data and radius data.
- Developed an iPlanet Messenger Express plug-in using CGI scripting and JavaScript. The plug-in added the ability for subscribers to manage e-mail filters. This involved writing a basic Sieve rule parser in JavaScript.
- Completed a user audit of an acquired company's provisioning system against the company's billing database. Services were provisioned using Unix passwd and shadow files and the billing information was stored in MS SQL databases.

- Planned and executed an upgrade of an iPlanet Messaging Server that served roughly 65,000 users. The upgrade including moving from a Sun 4400 to a Sun V880, moving the message store from NFS shares to local arrays, and upgrading the software from version 5.1 to version 5.2. Detailed plans, time lines accurate to the minute, and proof of repetitive testing was provided to management prior to the actual upgrade.

- Planned and executed the migration of an acquired ISP (MosquitoNet) consisting of roughly 6,000 users into ACS's ISP infrastructure. This included coordinated e-mail, web, FTP, DNS, and radius migrations.

- Implemented a FTP infrastructure that uses LDAP for authentication and supports virtual domains. Created custom LDAP schema to support infrastructure.

- Developed a system that uses data from LDAP and local templates to dynamically provision and re-provision virtual domains.

- Was primary administrator for DNS servers, iPlanet Messaging Servers, LDAP servers, and Unix web servers of the ISP business unit.

Internet Plus LLC dba MosquitoNet
Fairbanks, Alaska

Systems Administrator (May 2001 - August 2001)

- Set up and maintained MySQL databases for virtual hosting subscribers.

- Assisted with the initial migration of administrative tasks from MosquitoNet to ACS.

- Initiated the audit of MosquitoNet's provisioning systems.

- Implemented new web mail system.

- Managed daily operational tasks, resolved escalations from technical support, and provided a 24-hour response to system outages.

Computer Technician (March 2000 - April 2001)

- Provided technical support to wireless and business subscribers. Provided on site response in the event of extended subscriber outages.

- Installed simple office networks for small businesses.

Portfolio

Branches LDAP Administrator
http://itunes.apple.com/us/app/branches/id499800513

> Branches is an iOS LDAP administator. Branches includes a schema browser, directory browser, directory search tool, and RFC texts related to LDAP. In addition, Branches uses the server's schema to determine which attribute types and object classes to allow to be deleted, modified, or added when a user is modifying an LDAP entry.

iOS Ports
https://github.com/bindle/iOSPorts

> iOS Ports is a collection of F/OSS libraries which have been ported to the iOS platform for use when creating applications for the iPhone, iPad, or iPod Touch. iOS Ports facilitates the downloading of the source code and compiling for the target iOS architecture. iOS Ports accomplishes this using GNU Make to prepare the source code and Xcode to compile the binaries.

LDAP Kit
http://bindle.github.com/LdapKit/

> LDAP Kit is a framework which provides an Objective-C interface for the OpenLDAP client libraries by wrapping LDAP tasks in NSOperation objects and providing Objective-C classes for LDAP data types.

ODBC Shell
https://github.com/bindle/odbcshell

> ODBC Shell is a utility which provides a simple and polished command line interface to querying databases using ODBC. ODBC Shell uses GNU Readline to present the CLI, iODBC to manage ODBC connections, string manipulation to interpret the user's commands, and GNU Autotools to compile and configure the sources.

Ask Dave
https://github.com/bindle/AskDave
http://itunes.apple.com/us/app/ask-dave/id315173501

> AskDave is an entertainment application for the iPhone which uses CoreAnimation and the accelerometer to provide random animated answers.

Online Profiles

- iTunes http://itunes.apple.com/us/artist/bindle-binaries/id284942327
- Ohloh https://www.ohloh.net/accounts/syzdek
- LinkedIn http://www.linkedin.com/profile/view?id=70971430
- SourceForge http://sourceforge.net/users/syzdek
- Stack Overflow http://stackoverflow.com/users/903194/
- Github (Personal) https://github.com/syzdek
- Github (Business) https://github.com/bindle