David M. Syzdek

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Summary of Qualifications

- Possess expertise in creating portable programs and libraries with emphasis on using the development tools gcc, autoconf, libtool, and automake.

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

- Demonstrated knowledge of developing Unix daemons and related concepts such as Signal handling, process forking, logging, PID file management, and chrooting.

- Strong knowledge of LDAP design (both Sun One Directory Server and OpenLDAP) and of integrating applications with LDAP.

Technical Expertise

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

Documentation Formats
HTML, Perl Plain Old Documentation (POD), doxygen, Unix Man Pages, and Texinfo

APIs LDAP, MinGW, AppKit/Cocoa (OS X), UIKit/Cocoa (iPhone), Libtool, Pthreads, Berkeley DB, and Syslog

Concepts Unix Daemons, Networks, BSD Socket Programming (TCP and UDP), Portable Programming, CGI Programming, Cross-Compiling, Library Programming, Perl Modules, Source Code Control/Revision Control, Change Management, Software Documentation, and Open Source Licenses (GPL, LGPL, and FDL)

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

Standards Single Unix Specification (SUSv3), GNU Coding Standards, Filesystem Hierarchy Standard (FHS), and External Data Representation Standard (XDR/RFC1014)

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

Software Slackware Linux, FreeBSD, Solaris, Apple OS X, and Windows (98, 2000, XP)

Professional Experience

Alaska Communications Systems
Anchorage, Alaska

Acting IP Engineer II (2003 - current)

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 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 that 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 provisioning system that allowed multiple billing systems from different business units to provision services on a shared LDAP entry. This allowed services maintained from different billing systems for an individual subscriber to share a single user name and password.
- Wrote a library and client that 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.

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 allowed staff 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 systems 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.

HB Technical Services
Fairbanks, Alaska

      Systems Administrator (April 2001)

- Used OpenLDAP on Linux and OpenBSD to provide global address book and roaming Netscape profile solutions for small businesses.

- Used Linux and Samba as replacements for Microsoft Windows servers in small business environments. The replacements were used for primary domain controllers, file servers, roaming profiles, and print servers.

- Provided OpenBSD firewalls for small businesses.

- Produced and maintained Linux servers which provided Internet services such as web, e-mail, DNS, FTP, DHCP, and Webmail for small businesses.

- Provided on site consulting and support for small networks, workstations, and Linux and OpenBSD servers.

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 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)

    − Installed and configured 802.11b networking equipment at subscriber premises.

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

    − Acted as a sales person to expand MosquitoNet's user base.

    − Provided on site computer repair.

    − Installed simple office networks for small businesses.

Subscriber Support Technician (January 2000 - March 2000)

    − Provided technical support to email, dial-up, and virtual hosting subscribers.

    − Assisted in the computer repair shop as needed.

Additional Experience

Roman Numeral Conversion API
http://roman.sourceforge.net/

The Roman Numeral Conversion API is a small project which consists of a library and utilities which convert values for Roman numerals and Arabic numerals. The library and utility will compile on POSIX systems and on Microsoft Operating systems. The source code was written to adhere to the GNU Coding Standards.

magic8ball
http://www.bindlebinaries.net/products/magic8ball/

magic8ball is a simple iPhone application which simulates the toy created in the late 1940s. This application makes use of the device's accelerometer to determine if a new message should be displayed. This application is available for iPhones and iPod Touches running OS 2.0.

RPNCalc
http://www.bindlebinaries.net/products/rpncalc/

RPNCalc is implements a calculator using Reverse Polish Notation. This application makes use of CoreGraphics to generate the button images. The UIView objects are dynamically created without the use of Interface Builder so that a future version will be able to implement configurable button layouts and color schemes. The calcator was designed using MVC so that the keyboard layouts can be changed using view transitions while maintaining persistent calculator state.

Astute
http://www.syzdek.net/downloads/astute/

Astute is an imitation of the board game Boggle. This application is being developed using the Interface Builder and makes use of multiple windows and

keyboard inputs. This application has not yet been released and is still in development.