Resume: Michael J. Pedersen

Summary

I'm a DevOps Engineer with over 12 years of experience managing Windows, Linux, UNIX, and Macintosh systems. This means that I look at the whole picture, not just System Administration or Software Development. Shepherding a system through the creation and deployment process, and seeing the customer pleasure at having things work the way they need it to, is a particular joy of mine. Making people's lives better is the point of technology, after all.

I am comfortable in a wide range of working conditions. Work environments have been heterogeneous (Windows, OSX, and several flavors of Linux), small to medium sized (from 10 to 120 servers, 20 to 300 workstations), and mixed locations (all local to all remote teams).

Job History

Weight Watchers - Systems Engineering Lead

New York City, NY - 2014-2015

Weight Watchers is a Fortune 500 company focused on helping customers manage their weight and reduce health problems caused by it.

My role was focused on providing internal support within the company to enable other groups to support the customer base.

- Developed lightweight monitoring tool for use within my group.
- Configured Vormetric products to ensure HIPAA compliance for customer data.
- Worked to transfer from Rackspace Cloud to Openstack based private cloud.

OrcaTec, LLC - Developer

Atlanta, GA (Telecommute) - 2012-2014

OrcaTec is in the litigation support industry (they help their clients reduce the costs of being sued). OrcaTec is primarily a software-as-a-service company, allowing OrcaTec to host customer data. While working here, my focus has been on improving the GUI. This has involved refactoring code heavily, adding new features, and adding new tests to cover existing and new code.

The team structure at OrcaTec is geographically very diverse. In addition to my own telecommuting, I have teammates in many states. We all work remotely, and we all work together to make the product the best that it can be.

- Developed advanced search tool using Python, TurboGears, and jQuery.
- Created new document production framework from scratch.
- Spearheaded conversion from YUI 2 to jQuery and jQueryUI.
- Reduced multi-hour SQLAlchemy bulk database jobs to minutes.
- Found major security hole (remote code execution) and closed it.
- Debugged and resolved memory issues that were causing systems to shut down.
- Incorporated memcached into our stack to handle sessions and cached data.
- Installed and configured WSO2 Identity Server for our OpenID implementation
- Switched web server from Paster to Apache with mod_wsgi.
- Documented internal server API, wrote a Python class to standardize it's use.
- Added tag cloud (using awesomecloud plugin for jQuery).
- Corrected Unicode handling errors in the code.
- Added holds and matters framework, allowing customers to state that documents belonging to specific cases and should not be deleted while the cases are ongoing.
- Created a tool to allow copying settings between instances.
- Added support for allowing customers to login using OpenID.
- Added user preferences to the frontend.
- Resolved intermittent issue with drag/drop events that had been unsolvable by the existing team.
- Implemented login idle timeout functionality.
- Identified weaknesses in the database model, and added code to prevent those weaknesses from being hit.
- Wrote Python framework to manage long running background jobs.
- Refactored Python and JavaScript code on a regular basis to reduce code repetition and increase legibility.
- Mentored other developers in the use of TurboGears, SQLAlchemy, Python, and JavaScript.
- Organized weekly meetings for members of the frontend (OTGUI) team, providing a chance to discuss (in depth) the issues the team was facing.

Choopa.com - Developer

Sayreville, NJ - 2012

As a developer at Constant.com (renamed from Choopa.com in Jan, 2012), I worked with a variety of technologies, with the heaviest focus being on OpenStack and Nagios. I helped bring two products to production level availability for their customers (specifically: the Dedicated Cloud Server and Backup systems).

- Developed library to manage OpenStack nodes, and gather billing information.

- Built Nagios configuration file generator for in-house web interface for Nagios.
- Configured Bacula backup system as replacement for custom backup scripts.
- Reconfigured Nagios monitoring, reducing full check from 8 hours to 2 minutes.
- Refactored in-house Nagios web interface. This reduced the workload from six files down to one when adding new checks.
- Several smaller bug fixes and features throughout the internal code base.

6th Avenue Electronics - Systems Administrator, DevOps Engineer

Springfield, NJ - 2005-2008, 2011

In 2007, 6th Avenue began switching from their then-current POS system (named Tyler) to SAP. At the end of 2010, SAP was declared unworkable, and the effort was begun to switch back to Tyler.

The environment at 6th Avenue covered a wide range of platforms spread out over 120 servers (both physical and virtual). We had VMware ESX, Windows Server 2003, Windows Server 2008, CentOS Linux, Suse Linux, and Debian GNU/Linux. In 2011, I was brought back to transition the point of sale system and become the IT Manager. At the time the point of sale transition was completed, we had a team of 6 people managing the servers and about 300 desktops.

- Successfully lead migration from SAP to Tyler Point of Sale system.
- Developed Python validation scripts for data going from SAP into Tyler.
- Automated configuration options within Tyler that could not be done via import.
- Developed Python program to copy sales data from Tyler POS to PostgreSQL.
- Installed and configured Zenoss for full systems monitoring.
- Implemented VMware Virtual Infrastructure 3.
- Maintained Tyler POS/ERP system on HP-UX (and, later, Linux).
- Maintained Active Directory, including implementation of group policy.
- Wrote scripts to satisfy company needs using AutoIt3 and Python.
- Wrote automated installer for the Tyler client program to incorporate the program plus the mandatory pieces that we needed.
- Developed workaround to resolve issue in point of sales system causing store wide sales terminal lockups.
- Maintained heterogeneous environment (>60 Linux, >40 Windows servers).
- Implemented ticket tracking system for help desk issues.
- Deployed Windows Software Update Server for Microsoft product updates.
- Updated customer facing web site to reflect changes to NJ sales tax rates.
- Exported data from Tyler point of sale system for import into SAP system.
- Created an internal wiki for use by the IT department, including populating with over 30 pages of documentation at time of deployment.
- Wrote several scripts to extract data from Tyler POS system before PostgreSQL database was available.
- Maintained CommVault backup system and disaster recovery site.
- Developed intranet pages (using AJAX) to allow customer service representatives to find old invoices in the database copy of Tyler's data.
- Created intranet pages (using AJAX) to assist in the selling of complex systems.
- Retrieved bulk information from Tyler point of sale system for audits.
- Performed field certification of MaxDB system for CommVault, providing reliable and supported backups for SAP databases.
- Configured all servers for newly implemented SAP system.
- Spearheaded server room cleanup: Shut down over 30 servers, removed over a mile of wire.
- Rack mounted, installed, and prepared newly arrived servers for use in projects.

Datapipe, Inc. - UNIX Developer

Jersey City, NJ - 2008-2011

Datapipe manages thousands of customers servers. Many of these servers are connected to various shared storage systems, including 3Par, Isilon, and backup servers. Datapipe required an ability to do reporting on what data was being stored on these systems for each client, and then report that data back to billing. In addition, Datapipe required monitoring of the backup systems to ensure timely and complete backups of client data. My duties primarily focused on making these systems work well.

My team structure is worth describing briefly as well: My immediate manager worked out of Austin, TX. One coworker worked in the same building as myself, and I had two "extended" teammates who worked in Jersey City, NJ (I worked in Somerset, NJ). The extended team included the Windows developers, while I was on the UNIX development team.

- Created reporting system called StorageWeb (using TurboGears), enabling new revenue stream.
- Developed Python app named unixops, allows server access via one time SSH keys.
- Optimized PostgreSQL on FreeBSD. Bulk inserts reduced from hours to 20 minutes.
- Debugged Python, FreeBSD, Apache, and modwsgi working together.
- Developed multi-threaded back end daemon (in Python) which connected to the various storage systems and gathered the data about the stored data for reporting before pushing aggregate data to the billing system.
- Developed web interface that would allow users to drill down and see how storage was being used (by client, by server, by data center, and/or by storage type).

- Wrote tool to gather performance data from 3Par InServ nodes and display it via the client portal.
- Updated and maintained the existing backup monitoring tool which reported backup failures to our main ticketing system.
- Repackaged Bacula (internal name: SureRestore) for all supported platforms.
- Evaluated potential replacements for Subversion, including Git and Mercurial.

Diversified Systems - Systems Administrator / Developer
Hackettstown, NJ - 2002-2005
Diversified Systems is a small company that focuses on low voltage wiring and subcontracting. While there, I wore many hats, and did work on every system. The total number of servers for this company was less than 10, and the entire IT department consisted of myself.
- Developed GUI to new software system using PHP, Apache, and Mozilla.
- Automated sending faxes to techs, saving five hours/day (in a 10 person office).
- Deployed Unattended, an automated Windows installation system.
- Implemented HylaFax fax server for incoming and outgoing faxes, allowing electronic receipt of over 200 pages of faxes per day from field technicians.
- Worked with upper management to completely redesign entire business processes and systems company-wide (accounting, customer service, builder coordination, sales and warehouse management).
- Modified SQL-Ledger accounts receivable report for historical views of accounts receivable. The modified version was capable of showing how accounts receivable looked on a given day.
- Implemented employee remote-access system, using VPN (virtual private network).
- Deployed SNMP and monitored daily resource utilization.
- Converted structured portion of data from older system into a database, and provided training to employees on proper usage.
- Created PHP scripts to provide clean access to unstructured data from older system, and showed employees how to access and use.
- Managed upgrade of entire office to Windows 2000. This involved testing programs for compatibility, replacing obsolete programs, and determining proper installation procedures for undocumented installations.
- Resolved issues with the various systems which Diversified Systems installs in customer homes, including alarm systems, stereos, central vacuums, and structured wiring on a daily basis.
- Coordinated the activities of field technicians with customers to provide the maximum service level to the customers.
- Authored new scripts using Perl and PHP.

Ciber, Inc. / Decision Consultants - Member of Technical Staff
Greenwood Village, Co - 1999-2002
Decision Consultants (DCI) was acquired by Ciber, Inc., in 2002. While working for DCI, I was contracted out to Coors, IBM, and a .com named "X-Care" (no longer in business). The points below come from all of those places.
- Ran, and later automated, nightly code compilations for patient records program. This effort saved approximately 1000 developer hours per week. Before this effort, corrupted nightly compilations stopped the whole team until resolved (usually an entire day would be lost). After this effort, no corrupted compilations occurred for over six months.
- Revamped and improved scripts used by developers for retrieving the nightly code compilations and to perform their own personal compiles, providing new features as requested.
- Wrote several smaller scripts related to the compilation process, to help developers understand what would be required for their work to be completed.
- Researched/corrected error in Perl, permitting resolution of time-zone conversion issues, enabling global use of data from medical care providers.
- Created Perl scripts to migrate health care provider data between systems.
- Integrated AIX/Solaris servers into Windows NT network, allowing developers on Windows to access AIX/Solaris files/printers.
- Developed a set of Solaris packages allowing deployment of new servers within 2 hours of receipt.
- Developed Ghost-like utility overnight, meeting next-morning deadline for usable computer loads.
- Configured several Sun Ultra servers to work as part of a network. Original condition was such that they were on a network, but not working together. This involved re-mapping user id numbers, and configuring NFS mounts such that the machines worked together.
- Configured and administered a CVS repository.
- Created a set of Solaris packages to allow the deployment of new Solaris servers within 2 hours of receiving them.
- Coded many scripts to perform several daily tasks.
- Downloaded and tested new tools to be used for the compilation process, to make sure they still produced correct results.
- Installed Perl modules and programs as requested by developers.

- Documented all new scripts and processes, and informed developers when new documents were available.
- Participated in configuration of training room using Red Hat Linux with Kickstart.
- Assisted customers in resolution of issues with Windows 95, Windows NT, Microsoft Office, and other software packages in use throughout Coors.
- Instructed junior developers in the inner workings of C++.

Robert Half International - Technical Support
Boulder, Co - 1999
Robert Half International's client, StorageTek, provided large enterprises with long term backup solutions (typically involving dozens of tape drives, thousands of tape cartridges, and robotic tape libraries to manage all of it).
- Assisted customers of StorageTek in resolution of problems with both hardware and software products.

Sykes Enterprises - Systems Technologist
Denver, Co - 1998
Working for Sykes Enterprises, I was contracted out to Sun's internal Resolution Center. I worked with Sun employees around the world to resolve their issues with the workstations and servers they relied on daily.
- Performed remote operating system installations and upgrades.
- Resolved customer issues with Solaris 2.5.1 and Solaris 2.6.
- Wrote a Tcl/Tk script to speed up the process of logging into customers' machines for use in the Resolution Center.
- Wrote a Korn shell script to check a list of users and make sure that all users on the list were valid Sun employees.
- Added new users throughout Sun's internal network.

Fabian Corporation - System Administrator
Strousdburg, Pa - 1998
Fabian Corporation was a small virtual hosting provider for web sites during the fledgling web days, even before the dot-com era. A typical customer made a static web site and uploaded it via ftp to show to any web site visitors.
- Added new domains to Linux servers for web site hosting.
- Added new user logins to servers.
- Set up sendmail to forward email addresses from hosted domains to local users and remote users.
- Performed system upgrades (both hardware and software).
- Performed system backups.
- Dealt with security issues through upgrades, and removal of suspicious software.
- Installed firewall.
- Upgraded and recompiled kernel as needed.

MaxTech Corporation - Developer / System Administrator
Rockaway, NJ - 1995-1997
I was hired at MaxTech as a customer service representative. Over the time I worked there, I earned the opportunity to participate in system administration and the development of a new call tracking system to be used by the customer service team.
- Assisted customers daily with issues installing, configuring, and using their MaxTech modems.
- Discovered bug in the newly released modem drivers for Windows 95 and the MaxTech 28.8kbps modems.
- Created a new Windows based call tracking system to replace the old MS-DOS based call tracking system. Used Delphi and InterBase as the development environment and database.
- Rebuilt Novell NetWare server that had experienced hard drive crash. Did so while the server was in Atlanta, GA and I was in Rockaway, NJ.
- Fixed issues with the Lotus cc:Mail SMTP gateway.
- Helped test the new MaxTech website.

Personal and Side Projects - Developer, Systems Administrator
1995-Current
When I'm not working on projects for my employer, I'm working on projects for myself, or side projects for people who get in touch with me to make something for them.
- Studying Android application development at Udacity.com.
- Starting in 2009, I began participating in the TurboGears project, working primarily on the documentation. In 2011 and 2012, I was the lead project maintainer, and we put out three releases in 2011 alone. As of now, I still manage the server and DNS for turbogears.org, with work on documentation, bug fixing, new features, and mailing list management, as time permits.
- Created Java plugin for Openfire XMPP server, allowing vBulletin forums to have a working XMPP server for their communities.
- Created Linux-based network featuring NIS, NFS, DHCP, Linux firewall (using iptables), Samba, SSH, Subversion server, and Mercurial.

- Customized installation of Request Tracker for San Diego firm.
- Contributed patch to Mercurial to assist with repository conversions. Specifically, it allows branches to be renamed (useful for repositories that used named branches in Subversion to change their main trunk location).
- Implemented initial Pluggable Authentication Module support for HylaFax, which was accepted into HylaFax 4.2.0.
- Contributed code to MythTV project, allowing users to save recordings using custom cut lists, which allowed for easy removal of commercials.
- Contributed documentation to WebGUI project, showing how to design a custom theme for WebGUI.
- Contributed documentation to libpqxx project, showing how to compile libpqxx using MinGW/MSYS on Windows.
- Helped clients, family, and friends resolve various computer and home networking issues.

Specific Skills

Software Configuration Management Tools

	Time Used	Last Used	Proficiency
Git	2 years	2014	Fair
Mercurial	4 years	2014	Good
Subversion	2 years	2010	Good

Markup Languages

	Time Used	Last Used	Proficiency
CSS	2 years	2014	Fair
HTML	1 years	2014	Very Good
XML	2 years	2011	Fair

Programming Skills

	Time Used	Last Used	Proficiency
Object-Oriented Design	8 years	2014	Very Good
Object-Oriented Programming	8 years	2014	Very Good
Refactoring	4 years	2014	Very Good

Database Skills

	Time Used	Last Used	Proficiency
PostgreSQL Database Administration	1 year	2011	Fair
Relational Schema Design	5 years	2014	Very Good
Structured Query Language (SQL)	12 years	2014	Very Good

Operating Systems Administered

	Time Used	Last Used	Proficiency
Linux (Debian, RedHat, Suse, Ubuntu)	12 years	2014	Excellent
Microsoft Windows (2008/7/Vista/2003/XP/NT/98/95)	12 years	2011	Good
UNIX (Solaris, AIX, HP-UX)	5 years	2011	Very Good

Database Servers

	Time Used	Last Used	Proficiency
Microsoft SQL Server	3 years	2008	Fair
MySQL	3 years	2014	Fair
PostgreSQL	5 years	2011	Fair

Applications

	Time Used	Last Used	Proficiency
Ipswitch What's Up	2 years	2008	Good
Nagios	3 years	2012	Good
OpenStack	<1 year	2012	Fair
VirtualBox	3 years	2014	Good
VMware	6 years	2011	Fair
Zenoss	<1 year	2011	Fair

Networking and Security

	Time Used	Last Used	Proficiency
Checkpoint VPN	2 years	2007	Fair
Cisco	3 years	2011	Fair
Firewall Design	5 years	2011	Good
TCP/IP	10 years	2014	Very Good

Programming and Scripting Languages

	Time Used	Last Used	Proficiency
Bash	6 years	2014	Good
C/C++	12 years	2009	Good
Java	1 year	2014	Fair
Javascript	2 years	2014	Good
Perl	6 years	2012	Fair
PHP	2 years	2012	Fair

	Time Used	Last Used	Proficiency
[Python](#)	6 years	2014	Excellent

Education
Bachelor of Science in Computer Science, 2000
 East Stroudsburg University, East Stroudsburg, Pennsylvania

Project History

Advanced Search Tool

Period	2014
Company	OrcaTec, LLC
Tools	Python, jQuery, jQueryUI
Platform	Server: TurboGears, Browser (Cross Browser)

At OrcaTec, the primary tool we provided to our customers was the ability to search collections of documents quickly. In addition to having simple search tools, we also had a helper tool in the "Advanced Search".

This tool allowed the user to search based on a dozen different fields, but was still limited and fragile. It was unable to help the user build queries which combined different fields in a single clause. In addition, it had issues with encoding <> in email addresses, and did not support drag and drop on all of our supported browsers.

When this project was completed, this tool had transformed noticeably. It now is its own miniature investigative tool, allowing customers to easily search through collections of documents. One customer reported narrowing their searches from 80,000 possible documents down to under 2,000 within an hour through use of this tool. Due to extensive test coverage when the code was published, even the problems that were found were quickly fixable. All of this was accomplished while reducing the total code for it by 50%.

- Debugged issues with drag/drop on mobile browsers.
- Designed new interface for maximum flexibility, and to allow easy refinement of queries as they are being built.
- Incorporated user feedback to improve that design.

StorageWeb

Period	2010
Company	Datapipe
Tools	FreeBSD, Python, Apache, PostgreSQL, TurboGears
Platform	FreeBSD, Web Browser

Datapipe manages thousands of servers. Many of these servers are connected to various shared storage systems, including 3Par, Isilon, and backup servers. Datapipe required an ability to do reporting on what data was being stored on these systems for each client, and then report that data back to billing. StorageWeb was written to fill that need.

- Debugged issues with Python, FreeBSD, Apache, and modwsgi. Turned out to require specific compilation options to get these all working correctly.
- Developed web interface that would allow users to drill down and see how the storage was being used (by client, by server, by data center, by storage type).
- Developed multi-threaded backend daemon which connected to the various storage systems and gathered the data about the stored data for reporting.
- Developed backend daemon that pushed aggregate data to the billing system, allowing billing to finally happen for all clients.

Paster to Apache/mod_wsgi Conversion

Period	2013
Company	OrcaTec, LLC
Tools	Python, Apache, mod_wsgi, Paster
Platform	Ubuntu Linux

Paster is meant to be used in a development environment, allowing the developer to use a (single threaded) lightweight, easily managed webserver while writing code before it goes to production. At OrcaTec, we were using Paster both in development and in production. Due to the demands being placed on Paster (in many instances, loading up documents that were over 100M), the entire system could appear (to one user) to freeze up due to it responding to a request from another user.

After analysis, we were able to determine that Paster was no longer suitable for our needs. Since Apache, with mod_wsgi, provides an at least adequate performance web server (in comparison to others like Nginx), and the Apache configuration was already known to the team, we chose to switch from Paster to Apache. This allowed us to have Apache itself serve up static files (like images, css files, and javascript files), leaving the dynamic pages to the Python code.

- Debugged threading/locking/memory usage issues with Paster.
- Recompiled and repackaged Python 2.6.8, Apache, and mod_wsgi for use with Ubuntu 10.04.
- Developed automatic Apache configuration for use within our local stack.

SAP to Tyler Conversion

Period	2011
Company	6th Avenue Electronics
Tools	AutoIt3, CentOS Linux, Python
Platform	Server: CentOS Linux, Client: Windows

6th Avenue Electronics found that SAP was not a workable solution for them. The decision was made to switch back to the Tyler POS system, clearing out old mistakes and improving maintainability. I managed the technical aspects of the migration, while my immediate managers handled the business aspects. Due to the costs associated with SAP, we had just over three months, in total, to complete the transition. We were successful.

- Wrote several one-off scripts to check data that was sent in various Excel spreadsheets. Validate that all entries in column A of File 1/Sheet 1 are in Column C of File 2/Sheet 1.
- Used AutoIt3 to automate the update of several items that could only be keyed into the client. No import existed at all. This reduced work from several hours down to an hour (including the initial script creation).
- Developed an automated installer that was used to handle installing all components (receipt printer, fonts, initial configuration) on every machine in the company.
- Worked with Tyler Retail Systems to configure the server properly.
- Developed snapshot backup strategy that reduces downtime for Tyler to mere minutes per night.

UNIXOps

Period	2010
Company	Datapipe
Tools	FreeBSD, Python, Apache, PHP
Platform	FreeBSD, Web Browser

Datapipe provides managed hosting for its clients. This means that customers contact Datapipe to report issues on servers, and Datapipe administrators log in to customer machines as root to fix the problems. UNIXOps provides a secure method to allow the administrators a one time SSH key to login to the customer equipment, along with providing detailed logging of everything the administrator does for later review.

- Installed and configured client-side SSL certificate validation for Apache, requiring that machines connecting to UNIXOps provide a valid SSL certificate before being granted any access.
- Developed the code that would follow the workflow of Datapipe: Administrator requests access, UNIXOps configures the access on the client machine, administrator uses that access, and the access is revoked when used or 15 minutes have passed without it being used.

PyTyler - Tyler POS to PostgreSQL Migration Tool

Period	2007, 2011
Company	6th Avenue Electronics
Tools	Python, PostgreSQL, Tyler POS System
Platform	HP-UX, Debian GNU/Linux

Tyler is a point of sale system used by many smaller retail establishments. Tyler stores data in a set of proprietary ISAM files. These files do not have a modern access tool available (such as Crystal Reports) to perform reporting.

The users needed an easy way to report on the data, and this meant a tool was needed to copy the data from the on-disk files into a formal SQL server of some variety. In less than a month, I wrote a tool in Python to read the Tyler data files and load the information into a PostgreSQL database on a nightly basis.

This tool copied the entire database, comprising approximately 36,000,000 records, 140 tables, and 22 gigabytes of disk space. The program worked by reading the structure definition from the configuration files and recreating the structure in PostgreSQL. PyTyler would then read each table, row by row, parse the data in the row, and load it into PostgreSQL server.

This allowed the users to use standard ODBC drivers to access and report on the data.

- Developed a tool to read configuration of ISAM files, and generate SQL "create table" statements mirroring the structure of the file.
- Created a specialized reader class which could read the data stored in the ISAM table.
- Developed small web server application to provide status page for administrators while migration tool runs
- Reduced total run time from 13 hours to 5 hours by converting the entire application into a multi-threaded application.
- Verified that data is being copied into the system correctly.
- Tyler POS system was in production until the closure of the company in December, 2011, so data copy ran every night to bring in updated data from previous day's activities.

VMware Implementation

Period	2005-2007
Company	6th Avenue Electronics
Tools	VMware Virtual Infrastructure 3, VMware Virtual Center
Platform	Linux (Various distributions), Windows Server 2003

6th Avenue Electronics, like many companies, had a growing need for individual servers for various internal services. They chose to implement VMware to reduce hardware costs, downtime, and environmental costs.

- Installed and configured iSCSI based SAN disks.

- Installed and configured all aspects of [VMware] Virtual Center and [VMware] Virtual Infrastructure 3.
- Developed (and tested) virtual machine templates to allow rapid deployment of new virtual servers using various operating systems ([Windows] XP, [Windows] 2003, [Debian] GNU/Linux, [RedHat] Linux).
- Monitored daily usage of [VMware] hosts.

[SBN] Implementation

Period	2004-2005
Company	Diversified Systems
Tools	[SBN], [Sybase 11.0], [PHP]
Platform	Microsoft [Windows] 2000, [Debian] GNU/Linux

[SBN], published by IBSoft, is an ERP system for the alarm industry. Diversified Systems is a subcontractor working in the low voltage electrical industry, including alarm systems, stereo systems, central intercom systems, structured wiring, and central vacuum systems. I implemented all aspects of [SBN] at Diversified Systems.

The provided client interface was unsuited for the intended use. This resulted in much in-house development to augment the [SBN] client with a web-based interface.

- Configured all aspects of [SBN] from base installation to full production mode, with active communication with users at each step.
- Implemented over 50 custom screens and reports using [PHP] on an [Apache] web server. This included easier access to customer searches, more usable technician schedules, and easier input for large quantities of data.
- Developed automated system for the sending of faxes to field technicians,saving over 5 work hours per day.
- Implemented an automated backup system for the database.
- Administered [Sybase] instance on day to day basis, resolving issues with full log files, etc.

[SQL-Ledger] Implementation

Period	2005
Company	Diversified Systems
Tools	[Perl], [Apache]
Platform	[Apache], [Debian] GNU/Linux

The [SBN] accounting system was inadequate for the needs of Diversified Systems. This lead to the selection and installation of an external accounting package.

- Authored script to automatically migrate necessary data (customers, bills to be collected, etc.) from [SBN] to [SQL-Ledger].
- Installed and configured [SQL-Ledger].

[KP-CIS]

Period	2001-2002
Company	Ciber, Inc., contracted to IBM
Tools	[Perl], [Cygwin], [GNU Make]
Platform	Server: [AIX], Client: [Windows] NT

IBM was under contract to develop a complete clinical information system for Kaiser Permanente clinics. I participated as a member of the environment team, focusing on improving the build processes.

- Resolved issues with corrupted builds occurring weekly, resulting in savings of over 1000 work hours every week.
- Developed and improved approximately 450 compilation scripts and Makefiles on [AIX] and [Windows] NT/2000, fixing dependency issues and allowing reliable use of nightly code compilations.
- Evaluated, tested, integrated, and deployed new compilation tools.