#### **PATRICK A. MACDONALD**

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#### WORK EXPERIENCE

### 3/05-Present

# ATHENSGUY.COM Web Hosting Administration & Development Senior Unix Admin / Developer / Architect

- Daily PHP, MySQL, Apache2, Perl and unix shell development and administration for 200+ websites spanning six linux system.
- Setup and manage a small cluster of web/database servers using Unison file synchronization, mysql replication, and DNS IP round robin.
- Administrate, trouble-shoot, and develop web databases for over the 200+ customer websites in PHP, Apache2, and MySQL.
- Performed three cluster migrations to new hardware and linux versions with zero downtime for customer websites.
- Wrote several TCP/UPD/IP security programs that dynamically detect and block common hacking and abuse scenarios. We see an average of at least one hack attempt every 30 seconds.
- Maintained 99.9% uptime for all customer websites, databases, and linux servers since 2003 which includes ALL downtime. Almost everyone else excludes scheduled maintenance downtime from their stats.

#### **COX COMMUNICATIONS** (Alpharetta, GA)

#### 11/03-3/05

#### Senior Unix Administrator / Developer

- Implementing Six Sigma for three major operations projects. Earned Six Sigma Green Belt certification.
- Implemented asset management system for 500+ production Solaris and Linux systems. Develop custom probes for contract and vendor management.
- Authored document template for Operation documentation guides. Wrote several 20 page plus operational guides.
- Provisioning administrator and architect (for LDAP). I forecast future capacity for the LDAP architecture (12 enterprise servers) based off of detailed monitoring and statistics gathering I implemented.
- General developer for all System Operations needs. For example, I
  maintained and developed the internal ticketing system, time tracker, and
  group scheduler. All in PHP. I also design automation scripts for systems
  including NetBackup, Oracle, Apache, and many, many more.
- Initiated, designed, and implemented a centralized repository for server configuration files and scripts. T.R.A.M. periodically scans all servers and looks for changes, pulls changes back, and checks the changes into the centralized CVS repository. (self initiated)
- Saved Cox \$10,000/year by simplifying architecture in first major project implementation. Eliminated need for unnecessary external storage and related hardware for LDAP replication project.
- Owner and sole system administrator for 20 enterprise level servers.

## **ACCENTURE** (Norcross, GA) – Outsourced division from BellSouth

#### 1/02-11/03 **Senior Developer for Software Development Center**

- Designed and implemented ProvSync to synchronize various authentication databases with MCDB98.
- Designed and implemented an automated EJB service component tester tool. 100% of my EJBs' functionality was tested (120+ test cases) by running one command. It communicated directly with the Iplanet Application Server. Department followed my lead in testing. Perl and Java. (self initiated)
- Designed and implemented the provisioning EJB that maintains email business logic and accounts in Openwave's Intermail through the LDAP
- Responsible for production support of all developed applications.

### **BELLSOUTH.NET** (Dunwoody, GA)

#### 6/00-1/02 Senior Developer for Software Development Center

- Every SDC build used the 'make' framework I initiated. Designed and implemented enhanced Solaris Package support for Iplanet EJB building and deployment where deployment descriptor variables become configurable at pkgadd installation. Perl and Shell Scripting. (self initiated)
- Automated System Administration for 40 servers and 50+ users. Allowed over 40 system administrative tasks to be requested via the web. approved over pager, and completed automatically. When I was on vacation, my non-technical manager was successfully able to fulfill the sysadmin job. Written in Perl. (self initiated)
- Designed and implemented an automated installer for Iplanet Application, Directory and Web Servers with special consideration for easy administration. Perl and Shell Scripting. (self initiated)
- Designed and implemented RadiusService (Oracle backend) and DnsService (HTTP backend) provisioning EJBs for CRM based project.
- Designed and implemented provisioning interface to administrate email accounts in Software.com's Intermail system using Java and LDAP.
- Maintained production Java and C++ applications.
- Provided senior support for production Unix systems and applications including AAA, Mail and PWP Provisioning Clients and Targets, Hermes, SBR LDAP, Sendmail, and Radius.

#### 10/99-6/00 Senior Unix Administrator for System Operations

- Lead role in interviewing, training and developing other administrators. Designed interviewing guidelines and guestions for technical interviews.
- Senior level trouble-shooting of most production applications for BellSouth.net services. Designed administration scripts for system administration team.

#### 10/97-10/99 Unix Administrator for System Operations

- Saved company \$220,000 annually by designing and implementing a replacement for Tivoli management which has proven to be crucially more reliable and more versatile. Received BellSouth.net Red Dot award for CRUSADE project. Perl and Shell Scripting. (self initiated)
- Designed and implemented advanced monitoring solution for all 200+ production systems and 25+ unique applications. Created English-like monitoring language. Perl. (self initiated)
- Owner for the application responsible for tracking services for all business customers and Usenet News architecture. Sole admin over 18 Enterprise Unix servers.

Developed custom control for Tivoli enterprise management.

#### 6/95-10/97 **ACCUCOMM, INC.** (Irwinton, GA)

### Internet Manager, System and Network Administrator, Developer

- Developed advanced billing database specifically designed for Internet Service Providers which was solely responsible for decreasing the number of employees by one office manager (\$26,000 salary). This database immediately increased collections by over \$6,000 monthly (10%). Visual Basic. (self initiated)
- Designed, developed and administrated a Web based Unix user accounting system using embedded SQL in C for an Informix database on a UNIX server. Written in C. (self initiated)
- Designed and developed online network monitor for all Internet services with custom message dispatching to numeric and alpha-numeric pagers. Perl. (self initiated)
- Managed sales office for Internet Service and telephone reception for company of 6 departments.
- Designed, installed, and administrated Local and Wide Area Networks.
- Installed, developed, customized and managed a World Wide Web server.
- Registered and maintained Domain Name Service domains and servers.
- Implemented network and site security using TCP/IP filters in routers, TCP wrappers, and secured CGI designs.
- Made custom modifications to the Livingston Radius daemon for various in house ISP needs. Written in C.

#### **EDUCATION**

#### 9/93-6/95 GEORGIA COLLEGE, Milledgeville, GA

Awarded a BS in Computer Science. Courses included detailed study in data structures, software engineering, software craftsmanship, DOS and UNIX internals, artificial intelligence, graphic programming, and computer architecture.