IOANNIS E. TAMBOURAS

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Email replies preferred.

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SUMMARY

Senior Postgres DBA

* Expert in Postgresql: admin, replication, tuning, and PLs, 11 years

* Expert in Perl, 20 years

* Expert in Linux, scripting, networking, 20 years

* Strong in C, 20 years

* Availability immediate.

Core Areas

* All aspects of Postgresql, ETL, MongoDB (secondary)

* Perl, Postgres, SIP

* Lexers and context-free parsers

* Solid knowledge of mod_perl, HTTP/1.1, and Apache (including mod_rewrite),

  Past Areas of Expertise

* Advanced Unix programming, TCP/IP, XMPP, and SIP protocols.

* Embedded Routers, OS X, Hadoop

* ELF manipulation, advanced gcc, makefiles, GNU C extensions,

  and obscure compilation issues.

* XML using Perl.

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EDUCATION

Masters in Computer Engineering, Florida Atlantic University.

Thesis abandoned in 1997; it involved the design and implementation

of a mobile filesystem.

B.S. Computer Engineering, Florida International University., 1994.

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MAIN AREAS OF EXPERTISE

* Many Postgresql replication systems, querry optimizations,

  administration, 3NF, etc. Authored popular ETL Postgresql packages,

  and other contributions.

* Perl4, Perl5, and Parrot assembly. Broad experience, with particular

  emphasis on context-free parsers, DBI, cdbi, mod_perl, and XS .

  Related areas include networking, ipc, tt2, embedded Perl, CGI,

  Mason, curses, Moose, etc,. Visit my modules at CPAN, and writeups at

  perlmonks.org .

* SIP for Video Telephony, and NAT Traversal.

* Networking. Many protocols, including Mobile IP, IPSec, SSL, and SNMP.

* Advanced gcc, makefiles, GNU C extensions, and obscure compilation

  issues. Author of various ELF manipulation tools. Knowledgeable in ELF

  manipulation, manual re-linking (without ld), libdfd, loading,

  allocation debugging, and everything related to libraries,

* Parsers, Lexers, and Regexp

* Comfortable with embedded issues: uClinux, YAFFS, base-system

  integration, networking, Hadoop, and XML.

* ANCI C (C99), Clear understanding of many advanced concepts; POSIX

  103.1c (pthreads); Advanced Unix Programming, and TCP/IP protocols..

* Linux-kernel module programming, device/pseudo drivers, and VFS.

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OTHER COMPUTER SKILLS

* Sockets programming, ipc, POSIX 103.1c (pthreads), and RTLinux.

* Author of multi-threaded MIME codecs for Linux.

* Administered and troubleshooted Databases, UNIX networks, 3 nodes/UUCP.

* XML using Perl: Expat, DOM, SAX1&2 (machines, controllers, generators,

etc.), Schema, PYX, XML-RPC, XSLT, XQL, XPath, xsh, XPointer, and others.

* Image pattern recognition, mpeg2, jpeg, and multimedia-structured

databases.

* Lisp, java, C++, m4, ada, many assembly languages, awk, Expect,

Postgresql, Oracle8i, sql, plperl, plsql, sqlj, tcl/tk, cpp, gcc,

make, Apache, HTTP/1.1, cgi, mod_perl, and (some) Rexx.

* OS X

* Member ACM

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WORK EXPERIENCE

IBM 6/2012 - Present

    Postgres DBA, contractor

Responsibilities: Database architect for car navigation system

Designed high-availability (HA) infrastructure to accommodated

changing customer requirements. Performing benchmarks, DLL changes,

hardware provisioning, load-balancing and tuning appropriate for

unanticipated conditions of deployment.

Environment: Postgresql, Postgis, Redhat

Classmates.com 10/2012 - 5/2013

Postgres DBA

Responsibilities: Oracle->Postgres Migration, Postgres SME

Consulted on DR, data migration, deployment for high-traffic databases;

defused problems before they become critical on hybrid databases with

billion-raw tables. Designed, deployed, and managed processes for database

changes. Maintained and administered large, complex databases that support

the Classmates.com website, monitored databases and responded to critical

conditions. Defused problems before they become critical; ensured

database reliability, availability, and performance; and instituted

new backup and recovery procedures. Fine-tuned production resources for

optimal performance. Worked with the application support team to migrate

Oracle applications to Postgres. Build and improved scripts to automate

new tasks.

Environment: Puppet, PG, slony, symmetriDS, ora2pg, barman, etc,.

Footage Search 2/2012 - 8/2012

Perl Engineer & Postgres DBA

Responsibilities: Test tools, and Postgres DBA;

Consulting on tolerant architectures, database tuning, and Mod-Perl development.

AKRON Inc. 10/2009 - 12/2012

Lead & Postgres DBA

Project: Personspot and many others

Responsibilities: Team lead, test tools, and Postgres DBA;

other areas of involment included product development and mentoring.

Environment: Perl, Hadoop, Linux, OSX, SQL, C, and networking.

Viable Communications Inc.   2005 - 2009

Postgresql Consultant

Projects: MCS, VPAD, others

Responsibilities: Principal architect of the VPAD network, a distributed database

network for videophones; SME on SIP with troubleshooting;

other areas of involment included NAT traversal, POE servers, XMPP,

and other network protocols.

Environment: Perl, Linux, OSX, SQL, C, and networking.

AKRON Inc. 10/2002 - 2005

Senior Perl Developer

Project: Odyssey

Migration of custom CMS system to Bricolage

Sub-projects related to Apache handlers,

mod_perl, log analysis, Berkeley DB4 (C and Perl),

and Postgresql .

Project: CHS

A database-driven backend processing of TEI xml tags,

sponsored by Harvard University. Sub-projects related

to xslt and Bison parsers.

Responsibilities: Gathered customer requirements; implemeted

Internationalization support and (unicode-aware) parsing of

context-free text for the Hellenic script.

Project: NBCS

NBCS is the computer system for American Red Cross to

track blood donors and blood components.

Responsibilities: Provided technical analysis to System Problem

Reports (SPR's) for blood donations and component distributions.

Daily duties included 3rd tier support, resolution of Change

Requests, and development of service packs.

Environment: AIX, ksh, Oracle, C, and Perl.

Project: MOTION DETECTION

Project: INET-BACKUP

INET-BACKUP is a distributed storage system over the Internet,

implemented by United Storage: through a Java interface, encrypted

data are uploaded to remote peers, and later retrieved from surviving

peers on request.

Responsibilities: My initial task was to review design and

focus on the data-corruption problems. This, in turn, led to

basic research on voting lock, and later to a feasibility study

on how a solution could be implemented within 6 months. The

results of this study formed the basis of discussions and of

documentation notes among developers.

Environment: Red Hat Linux, Cisco routers, C, Perl, openSSH, Postgresql.

Project: WEBMIN

The goal of the Webmin project was to install a GUI front-end and

customize it for embedded systems based on Linux.

Responsibilities: I was responsible to cross-compile the smallest

possible functional subset of the Perl distribution against uClibc,

trim elf headers from binaries, and trim system libraries from

unused object so that everything can fit on Flash. As part of the

Webmin team, I also wrote Webmin modules until the project was

disbanded during layoffs.

Environment: Red Hat Linux, C, Perl, ELF.

Ener1 Inc. (aka Boca Research Inc.) 1/2001 - 8/2002

Embedded-Linux Consultant.

Project: AOL-ROUTER

The AOL-ROUTER project constructed routers for the AOL/Time Warner.

We build the motherboard, we wrote the BIOS, and we embedded the

software.

Responsibilities: My main tasks were to port the core the core libraries

to our National Semiconductor cpu, setup the Linux development environment,

and walk from desk to desk to resolve issues related to Linux, Perl,

and portability issues. Other tasks included firewall rules, build

the cvs-based packaging system, and implement development tools using

Perl.

Environment: Debian Linux, Red Hat Linux, gcc, C, Perl, networking,

device drivers, cvs, makefiles, dialog, unix scripts, firewall, and

OpenBSD.

Peach Tree 9/2001 - 5/2002

Co-owner, Linux/Perl Developer

Founded my own traffic-shaping company. The main product was

a SOHO router that provided adjustable QoS features for

Internet connection.

Responsibilities: Advised the CEO on technical issues. Converted

all system and network software to use uClibc and Perl,

and created a complete distribution for our embedded Linux system.

Adapted the busybox curses-menu program to select what programs

to compile/install inside the flash image - including dependencies.

Environment: uClinux, embedded, networking.

Linux Wizardry Inc. 3/2001 - 9/2001

Chief Linux Engineer

Project: MAGIC-PASSAGE

The MAGIC-PASSAGE team was involved in all aspects of the MagicPassage

router, our flagship product. It is a SOHO router based on the Motorola

Coldfire, with firewall/VPN capabilities and a Java interface.

Responsibilities: I was responsible for everything related to

development, except for the Java interface. In addition to

networking, this included uClinux development, VPN troubleshooting,

and utilities using C, like sashay(1) -- a Bourne-like shell for

embedded Linux. Other major tasks included the XML interchange

and Expat programming using C.

Environment: uClinux, Debian Linux, Red Hat Linux, Coldfire,

embedded tools, and CVS.

Project: IPSEC

The IPSEC project introduced IPsec capabilities to the MagicPassage router.

Responsibilities: I was responsible to lead development and port IPsec to the Motorola 5307 processor, and of course, to everything related to Linux and networking, but not for the Java interface. Daily tasks included Unix programming, Perl scripts, uClinux-libc, firewall rules, and kernel level encryption. Coordinated with the Java team and with the marketing department regarding IPsec capabilities and configuration. Administered the backup server, the cvs repository, and our OC3 connection to the Internet. In addition, I wrote all technical notes on IPsec regarding our different configurations and setups.

Environment: uClinux, Debian Linux, Red Hat Linux, Coldfire, embedded tools, and CVS.

Project: STOCK-HEURISTICS 2000 - 2000

This was a collection of programs that used speech synthesis to monitor stocks in real time during the day, and populate the database with data during the night.

Responsibilities: Requirements gathering, design, implementation, and live testing. It was a one-man task, with everything done in Perl.

Environment: Debian GNU/Linux, ad-hoc mobiles, Postgresql, and Perl.

Debian GNU/Linux 1995 - 2001

Linux Developer

Debian is considered by some the most respectable Linux distributor.

They distribute Linux and NetBSD operating systems for various cpu

architectures, using the same core subsystem and packaging system.

Florida Atlantic University 2000 - 2000

Professor Assistant

Course: UNIX SYS PROGRAMMING

Responsibilities: My duties was teaching Unix Programming, COP 4604,

and 2 weeks on Web development. Besides class preparation, I solved

class assignments ahead of time, graded homework/exams, and sought

to maintain personal contact with failing students.

HEC and Poseidon WWW Projects 1995 -1996

Technical Development, and (later) Member of the Board of Directors.

Responsibilities: Supervised the day-to-day operations

of the technical department, assigned tasks to developers, interviewed

new members, and contributed to all major technical decisions, implemented

tools using Perl, added features to software using C/C++, and

occasionally attended code reviews.

Responsibilities as Member of the Board: Provided technical advice

to the board. As a voting member, I attended board meetings and resolved issues of general nature.

Environment: Slackware Linux, Debian Linux, and Perl4.

Cristian Cohler Inc. 1995 - 1996

Network Techician

Responsibilities: Installed and Troubleshooted Unix networks for local businesses. Frequent use of Unix scripts and standard utilities, Perl, C, Unix Programming, and constant tcpdump(1) troubleshooting.

Environment: Slackware Linux, and SVR4 at some occasions.

Linux International 1994 - 1995

Project: NLS

Responsibilities: Adapted C code for POSIX.1 compliance.

Environment: Slackware Linux.

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