

Quinn D. Weaver quinn.weaver@gmail.com
Oakland, CA
510-520-5217

Experienced PostgreSQL DBA with a strong background in Web development using Perl (Catalyst) and jQuery. Also experienced in DevOps and Asterisk IVR programming.

PROFESSIONAL EXPERIENCE

PostgreSQL Experts, Inc.
Database Consultant

March 2009 - Present
San Francisco, CA

Provided database consulting services to clients on bare metal, VMWare, EC2, and RDS, including:

- Project management.
- Performance benchmarking and tuning.
- Corruption diagnosis and mitigation.
- Autovacuum tuning and troubleshooting; XID age issues.
- Replication and PITR setup and maintenance (WAL-E, Barman, and custom setups).
- Connection pooling setup (PgBouncer); fixes to app-level connection pooling.
- DevOps automation (Salt, Chef).
- Hardware migration and PostgreSQL upgrades.
- Schema design and DDL; multitenancy design; sharding recommendations
- LDAP authentication setup.
- Unit testing using pgTAP.
- Helped maintain PGX's in-house Python and SQL tools.

Quinn Weaver Consulting
Consultant

February 2007 - March 2009
Oakland, CA

Consulted for clients in fields ranging from health care to finance and VoIP. Highlighted projects include:

- Wrote an intranet web app in Catalyst, MySQL, and jQuery to track scheduled and administered medication dose schedules for hospital.
- Ported a legacy VXML (Voxeo) IVR system to Asterisk, which involved rewriting the old system from scratch.
- Using Catalyst and jQuery, wrote an internal web interface for an in-house Ant build system.
- Performance-tuned the mod_perl server that provided an internal web service.
- Added features to a RESTful web service that wrapped a proprietary third-party product.
- Performed Catalyst evaluation. Wrote a prototype app; chose libraries for templating, ORM, form-processing, web services, and logging.

Fairpath
Entrepreneur

May 2005 - February 2007
Oakland, CA

- Founded Fairpath, a company focused on VoIP IVR.
- Wrote Dido, a Perl IVR development platform based on Asterisk.
- Set up and administered web and monotone servers for the system.

Barclays Global Investors
Software Engineer II/Project Lead

January 2001 - April 2005
San Francisco, CA

- Rewrote a legacy trading system as an intranet SOAP service, using object-oriented Perl. Resolved interoperability issues.
- Designed and documented the architecture of a custom mod_perl service to act as an intermediary

between client apps (written by different groups in different languages) and legacy database systems (with different schemas), transcoding data into a database-agnostic XML format.

- Conducted the company's evaluation of Perl Web templating systems, leading to creation of company standards.
- Added audit-mandated data to an in-house security and Sarbanes-Oxley database to monitor Sybase, Windows, Unix, and NIS+ group access, and raise exceptions for unauthorized privilege grants. Extended a sophisticated database schema to accommodate these new data.
- Managed migration from RCS to hosted CVS. Trained fellow developers on CVS. Wrote Perl command-line tools to push code to QA and production boxes. Wrote a script to import stray post-migration RCS checkins from RCS to CVS.
- Developed a web-based stock data visualization tool for portfolio managers.
- Helped develop and maintain a quantitative trading system for active investment. This system makes the majority of the company's money. I was responsible for adding new programs and features to the system, working closely with the portfolio managers who were its end users.

Vovida Networks, Inc. / Cisco Systems, Inc.
Software Engineer I

October 1999 - January 2001
San José, CA

- Wrote a GUI visualizer for SIP (Session Initiation Protocol) transactions.
- Built Linux desktops, Linux servers, and LAN as group grew from 15 people to over 70.
- Hired an assistant sysadmin. We handled all functions from building the network to purchasing hardware to administering systems, and migrated the network to a second office as the company grew.

IBM Almaden Research Center
Intern

June 1999 - August 1999
San José, CA

- Wrote plugins and documentation for the Java smart web proxy WBI. Later this product was commercialized as the core of an IBM XML transcoding engine.

Indiana University
Unix Workstation Support Specialist

June 1998 - October 1999
Bloomington, IN

- Consulting/troubleshooting sysadmin for a university of 30,000 students. My team of five handled all departments and labs; I was the Linux and Solaris specialist.
- Helped plan curriculum and wrote web pages for a first-of-its-kind online course for training Unix systems administrators. Taught lecture sessions; coached students through hands-on training.

TECHNICAL SKILLS

PostgreSQL database administration.

Project management.

Unix system administration and DevOps.

Web app and web service programming (Perl, Catalyst, jQuery).

Asterisk configuration and IVR programming.

Command-line Python scripting.

EDUCATION

Indiana University, Bloomington

Bachelor's Degree: Double Major in Cognitive Science and Classical Studies; Minors in Computer Science and Spanish

TECHNICAL SKILLS (DETAIL)

- Linux/Unix hardware benchmarking and kernel parameter tuning.
- Linux/Unix system administration.
- Technical writing.
- Frequent speaker on PostgreSQL at technical conferences. Sample slides:
 - <http://fairpath.com/vacuum-slides.pdf>
 - <http://fairpath.com/locks.pdf>
- Maintainer of the open-source tool Flexible Freeze, a Python program for a PostgreSQL DBA task (reducing bloat and XID age via a nightly cron job). <https://github.com/pgexperts/flexible-freeze>
-
- DevOps automation technologies:
 - Salt.
 - Chef.
 - Bespoke Bash, Perl, and Python scripting.
- PostgreSQL database administration:
 - Over 10 years' experience as a PostgreSQL consultant.
 - Capacity planning and provisioning for bare metal, EC2, and RDS.
 - Installing PostgreSQL: Linux, other Unixes, Windows (Cygwin).
 - Schema design.
 - Performance tuning, including query optimization.
 - Troubleshooting.
 - Upgrades and migrations.
 - Streaming/WAL-shipping replication for redundancy and high availability.
 - PITR (point-in-time recovery) backups: setup, testing, and disaster recovery.
 - Setting up monitoring, trending, and alerting systems.
- PostgreSQL coding:
 - Writing SQL statements for use in apps, reports, ETL/other data processing.
 - DDL (data definition language) migrations code review. Well-versed in keeping DDL from locking out other queries or autovacuum (see my locks.pdf slides linked above).
- Familiar with MySQL.
- Experienced in migrating data and codebases from Oracle and Microsoft SQL Server, to PostgreSQL.