



PostgreSQL

The world's most advanced
open source database.

Introducing PostgreSQL 8.0

Simon Riggs

PostgreSQL Developer

Volunteer UK Press Contact



What is it?

- PostgreSQL is a highly scalable, SQL compliant, open source object-relational database management system. With more than 15 years development history it is fast becoming the de facto database for enterprise level open source solutions.
- PostgreSQL 8.0.1 was available in January 2005



PostgreSQL in Brief

- Database Management System (RDBMS)
- Client-Server, Multi-user, High concurrency design
- SQL compliant, with advanced query optimizer
- Scalability and Performance
- Robust, Secure and Highly Available
- Object-Relational and User Extensible
- Fully Open-Source software and project



What's Familiar

- Similar features to other RDBMS...
- Server process `postmaster`
- Configuration files `postgresql.conf`
- Command line tools `psql`
- Admin GUIs `pgAdminIII`
- Procedural Languages `PL/pgSQL`
- SQL `SQL:2003`



What's cool

- Full Constraint and Referential Integrity features
- Function-based indexes
- Multiple server-side languages
- Multiple client interfaces
- XML support
- Huge range of add-ons
- Your questions get answered...



Who's using it?

- Enterprises
- Service Providers
- Application Software Vendors
- Architectures
 - Java
 - LAMP
 - Data Warehouse



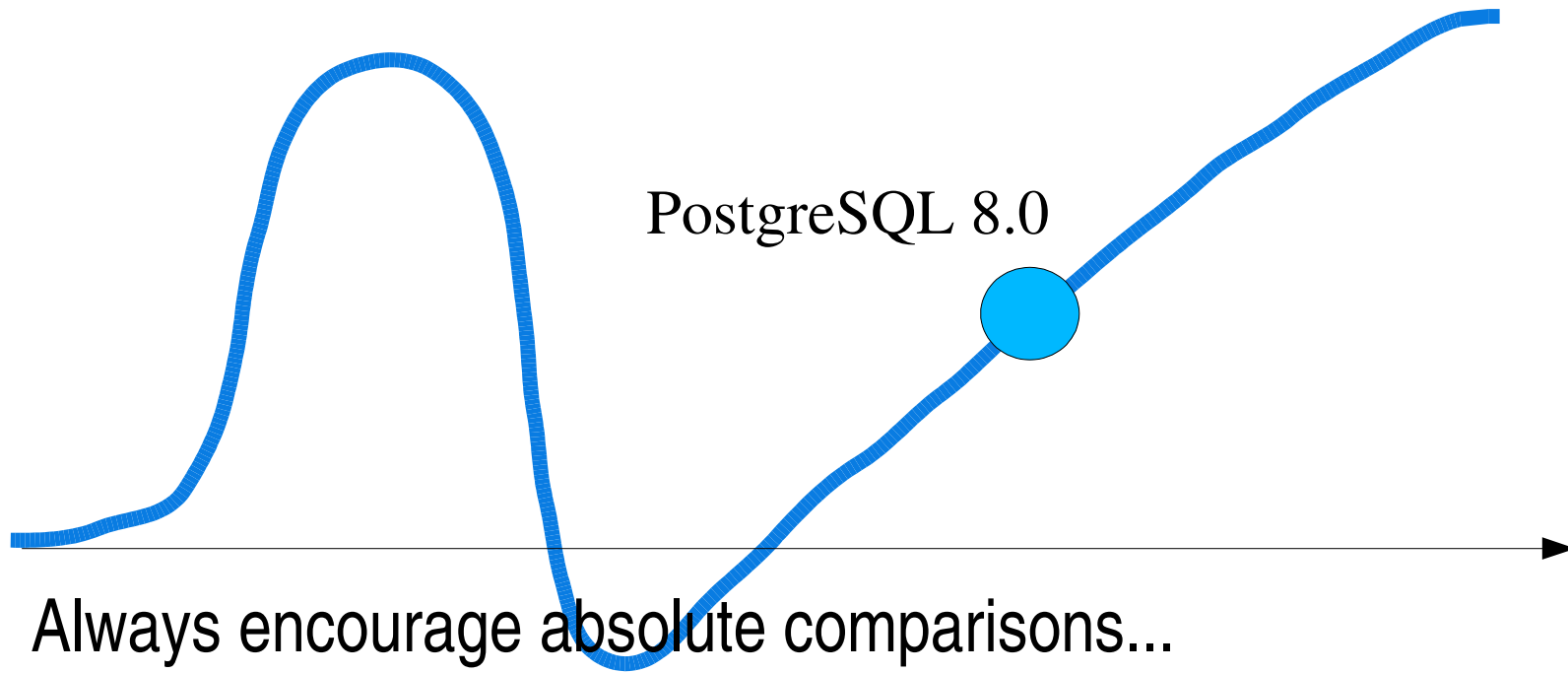
What's New in 8.0?

- Native Windows port
- SAVEPOINTS
- Point in Time Recovery
- Tablespaces
- Enhanced memory management
- Many enhanced DBA usability features
- Extended documentation



Hype?

- “Analyst speak”



- Always encourage absolute comparisons...
 - Can it do the job we want it to do?



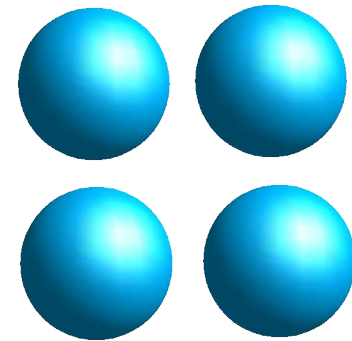
What matters?

- Features
- Performance Headroom
- Risk
- TCO
- Active Community



Performance

- Excellent raw performance
- ~4000 tpm on DBT-2
- Fully utilise a 4-way Opteron, with 4 GB RAM, appropriate disk subsystems
- Advanced Optimizer
- Intuitive index use
- Publicly available performance tests





Risk

- Reliability – Code Refactoring
- Availability – Slony, Locking, Vacuum
- Serviceability – Open Source
- Security – Very low threat-to-fix times
- Recoverability - PITR



TCO

- Costs
 - Initial License
 - Maintenance
- Usability
 - “It just works”





Active Community

- Fellow Users
- Developers
- Consultants
- Staff...
- List Support
- Pay-for-Support
- Training
- Books

Sponsors and Supporters

- Red Hat
- Fujitsu
- Afilias
- Others....
- DBMS companies: Pervasive
- Open Source Development Labs (OSDL)
- Various Community Businesses





What's in 8.1?

- Bitmap indexes
- Fully Integrated autovacuum
- Two phase commit JDBC driver
- Stored procedures
- Improved scalability and performance
- Native log shipping solution for high availability



PostgreSQL 8.x

- High Features, High Performance
- Long development history, yet Rapidly evolving
- Excellent funding and development roadmap
- Commercial & Free Alternatives

- It's gonna happen...



2ndQuadrant

- simon@2ndquadrant.com
- Training www.2ndquadrant.com
- Development
- Support