



Basis Data 2

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Pengenalan Database PostgreSQL

Berasal dari Kampus

The University of California at Berkeley



Pengembang Awal

Postgres



Michael Stonebraker

Postgres95



Jolly Chen and Andrew Yu

Sejarah kode program

- Ingres — research prototype, spawned Relational Technologies, purchased by Computer Associates
- Postgres — research prototype, spawned Illustra, purchased by Informix
- Postgres95 — added SQL, spawned PostgreSQL

Perkembangan PostgreSQL

1977-1985 Ingres

1986-1994 Postgres

1994-1995 Postgres95

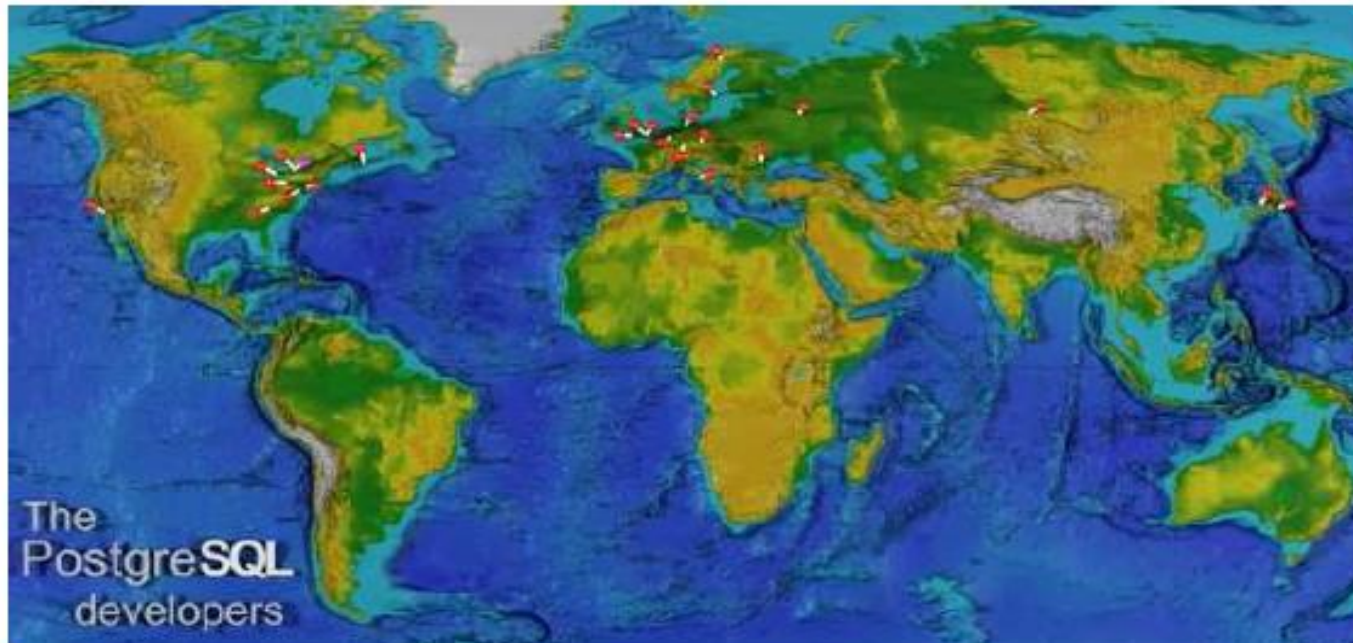
1996- PostgreSQL

PostgreSQL Evolution



Pengembang di seluruh dunia

Developer's Globe



Tim Inti

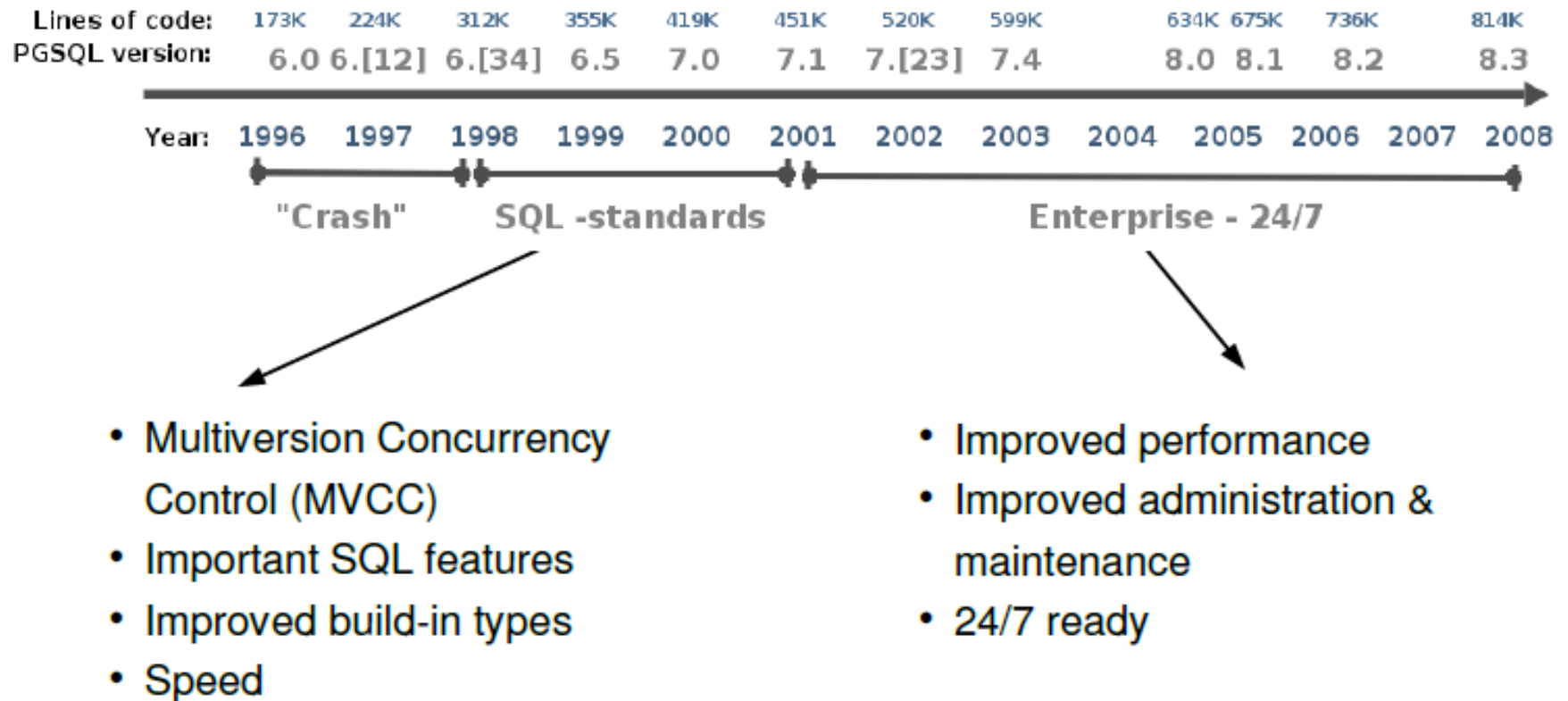


Top row: Thomas Lockhart (retired), Jan Wieck, Tom Lane, Marc Fournier
Bottom row: Vadim Mikheev, Bruce Momjian

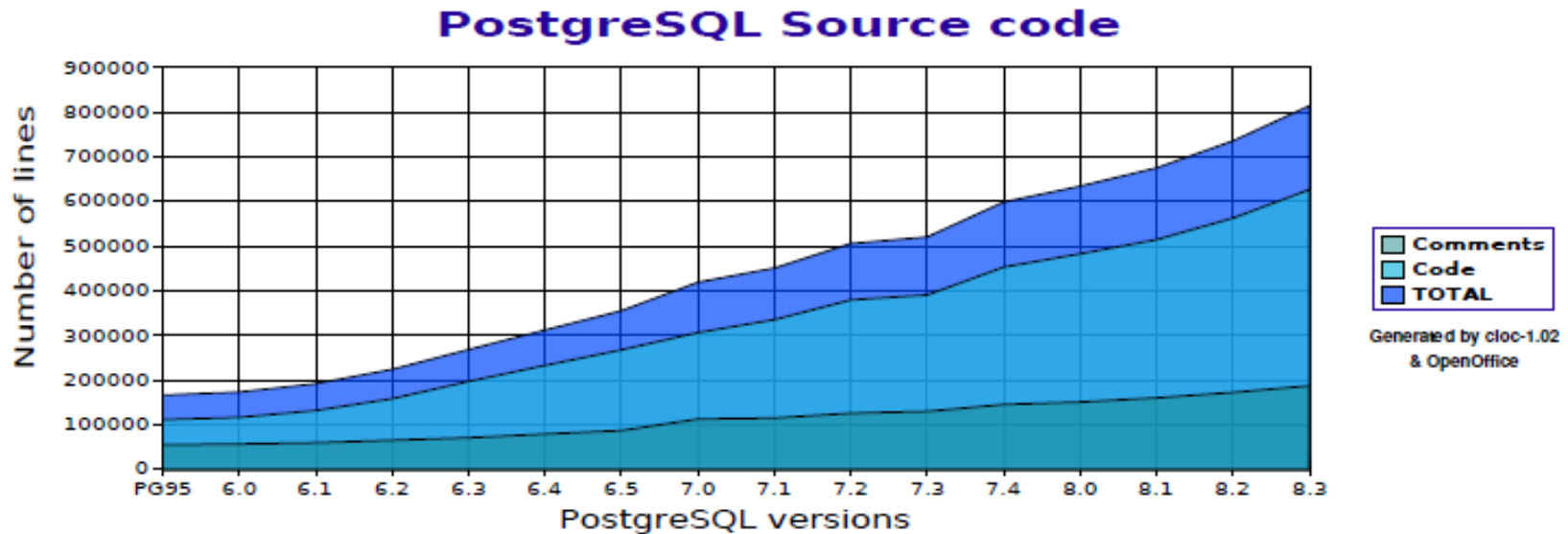
Release Kode Program (1)

Date	Release	Lines of code
1994		244,581
1996-08-01	1.02.1	
1996-10-27	1.09	178,976
1997-01-29	6.0	
1997-06-08	6.1	200,709
1997-10-02	6.2	225,848
1998-03-01	6.3	260,809
1998-10-30	6.4	297,918
1999-06-09	6.5	331,278
2000-05-08	7.0	383,270
2001-04-13	7.1	410,500
2002-02-04	7.2	394,274
2002-11-27	7.3	453,282
2003-11-17	7.4	508,523
2005-01-19	8.0	654,437
2005-11-08	8.1	630,422

Release Kode Program (2)



Release Code Program (3)

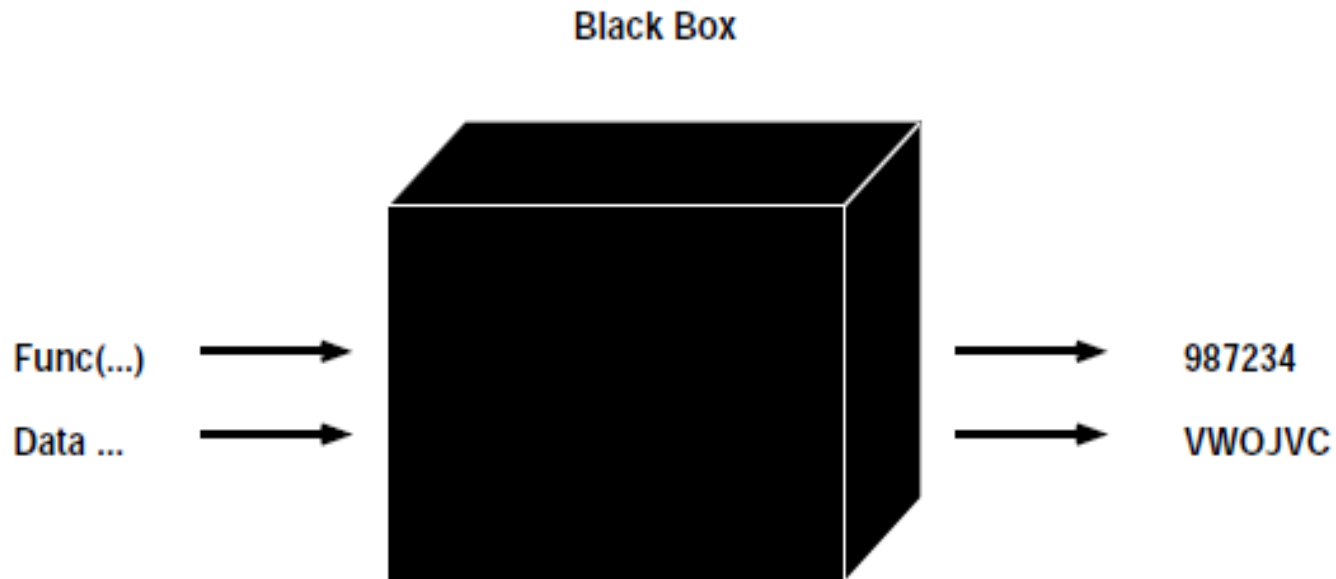


- Total Physical Source Lines of Code PG-8.3.0 (SLOC) = **814,787**
- Development Effort Estimate, **Person-Years** (Person-Months) = **227.83** (2,734.05)
- Schedule Estimate, **Years** (Months) = **4.21** (50.57)
- Estimated Average Number of **Developers** (Effort/Schedule) = **54.06**
- Total Estimated **Cost** to Develop (Avg.salary: \$70,000/year, overhead: 2.40) = **\$38,238,854**

Mengapa Menggunakan PostgreSQL

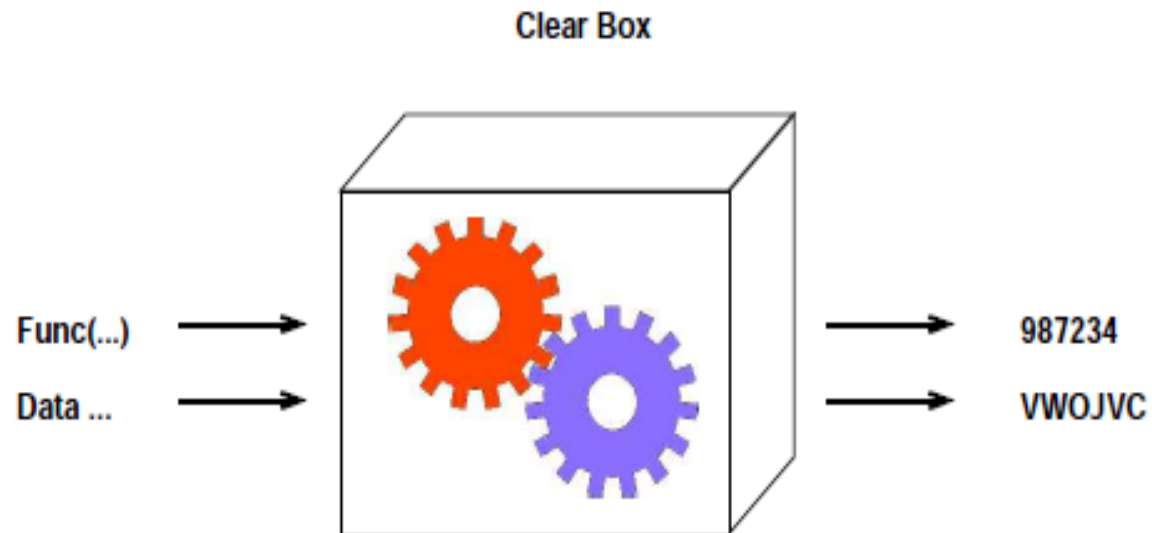
Close-Source

Closed-Source Software



Open-Source

Open-Source Software

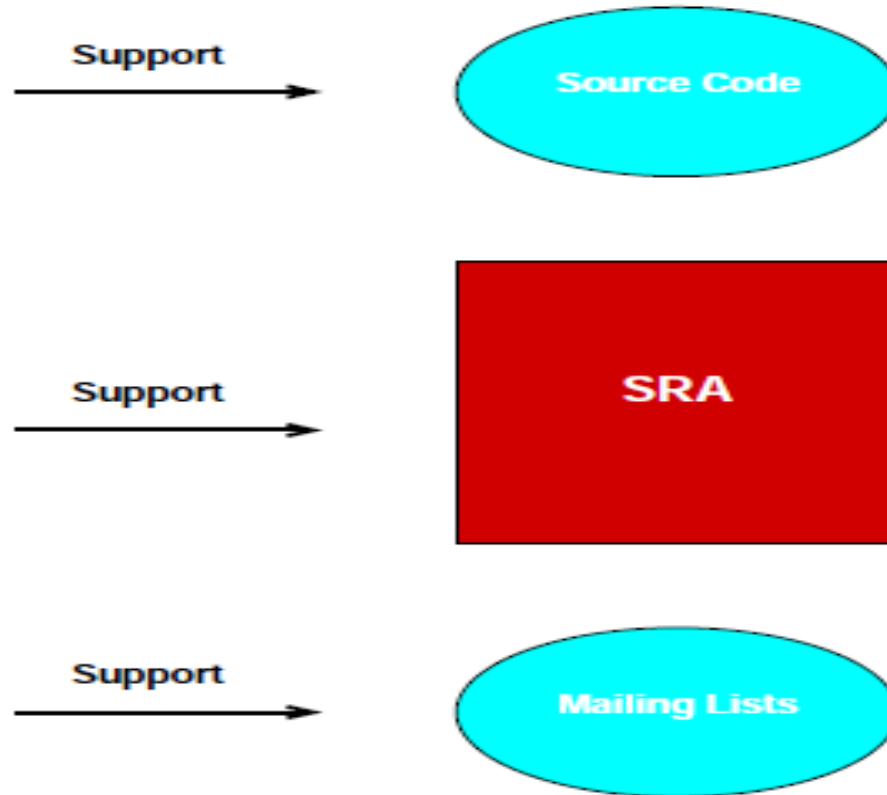


Dukungan *Close-Source*

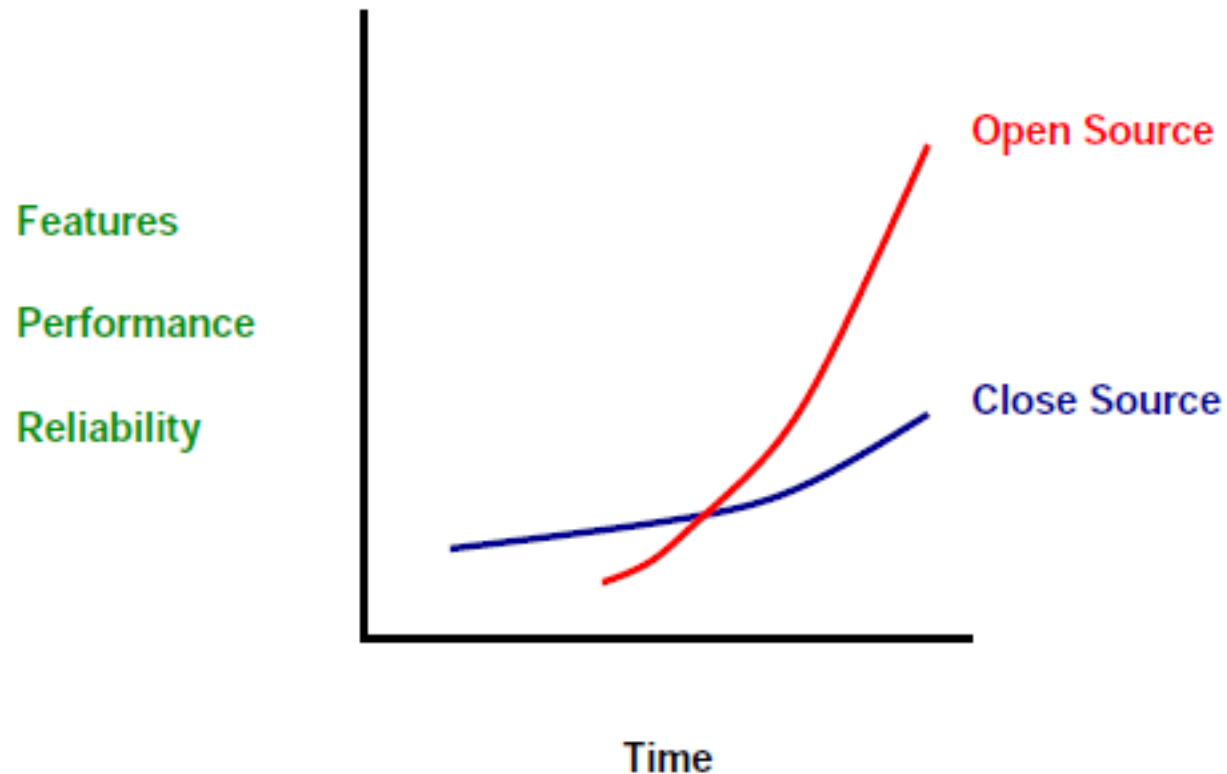
Support of Close-Source Software



Dukungan *Open-Source*



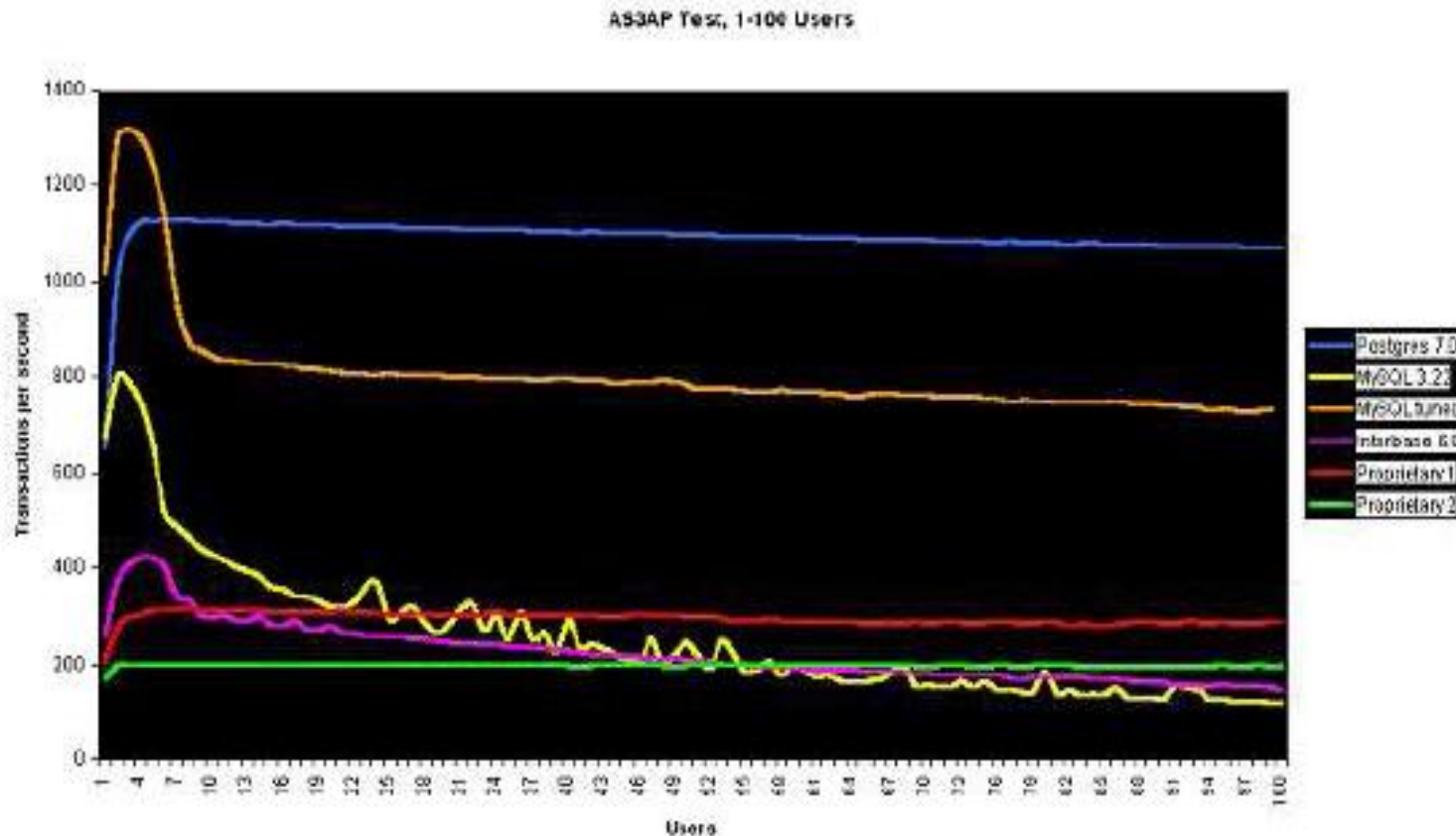
Masa depan *Open-Source*



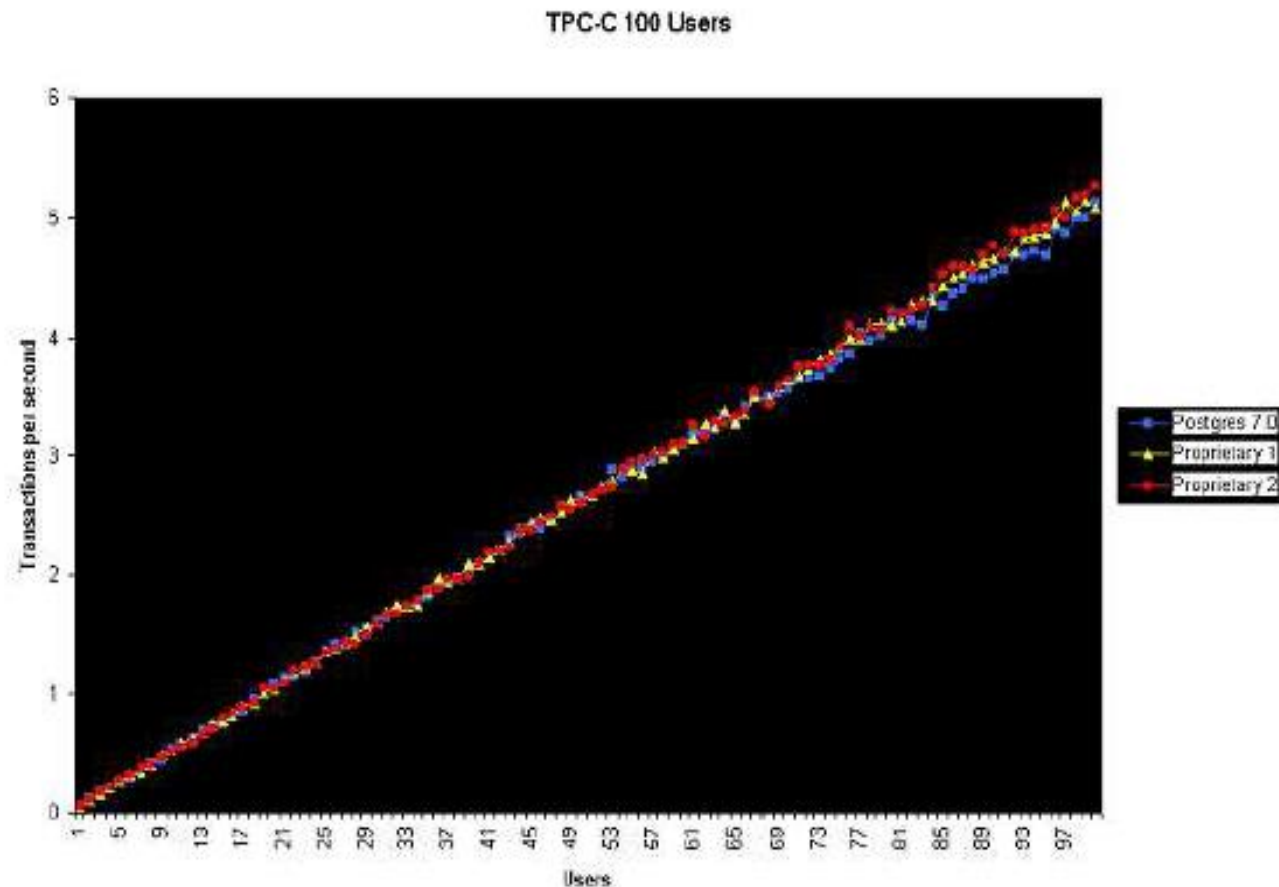
Menghemat biaya



Performa (testing 100 users)



Performa proses transaksi



Pengguna PostgreSQL

Migrasi Database

- Oracle
- IBM's DB2
- Microsoft-SQL
- Microsoft Access
- Informix
- Interbase
- Dbase/FoxPro
- MySQL

PostgreSQL pada aplikasi

- Order Entry, Inventory, Billing
- Customer Relations Management (CRM)
- Data warehouse, data analysis
- Medical/Hospital records storage
- Genetics
- Financial Accounting, Banking, Payroll
- Military
- Government. Social services. Elections
- Education
- Publishing
- Geography (GIS)
- Hotel Reservations, Restaurants
- Telephone billing, call tracking
- Helpdesk problem report tracking
- Sales tracking
- Business to business commerce

PostgreSQL untuk website

- Product purchase
- User preferences
- Job listings
- Auctions
- Real estate listings
- Community building
- Dynamic content
- Text indexing

Pengguna

- DaieiOMC
- Tsutaya
- BASF
- The American Chemical Society
- .Org

Dukungan

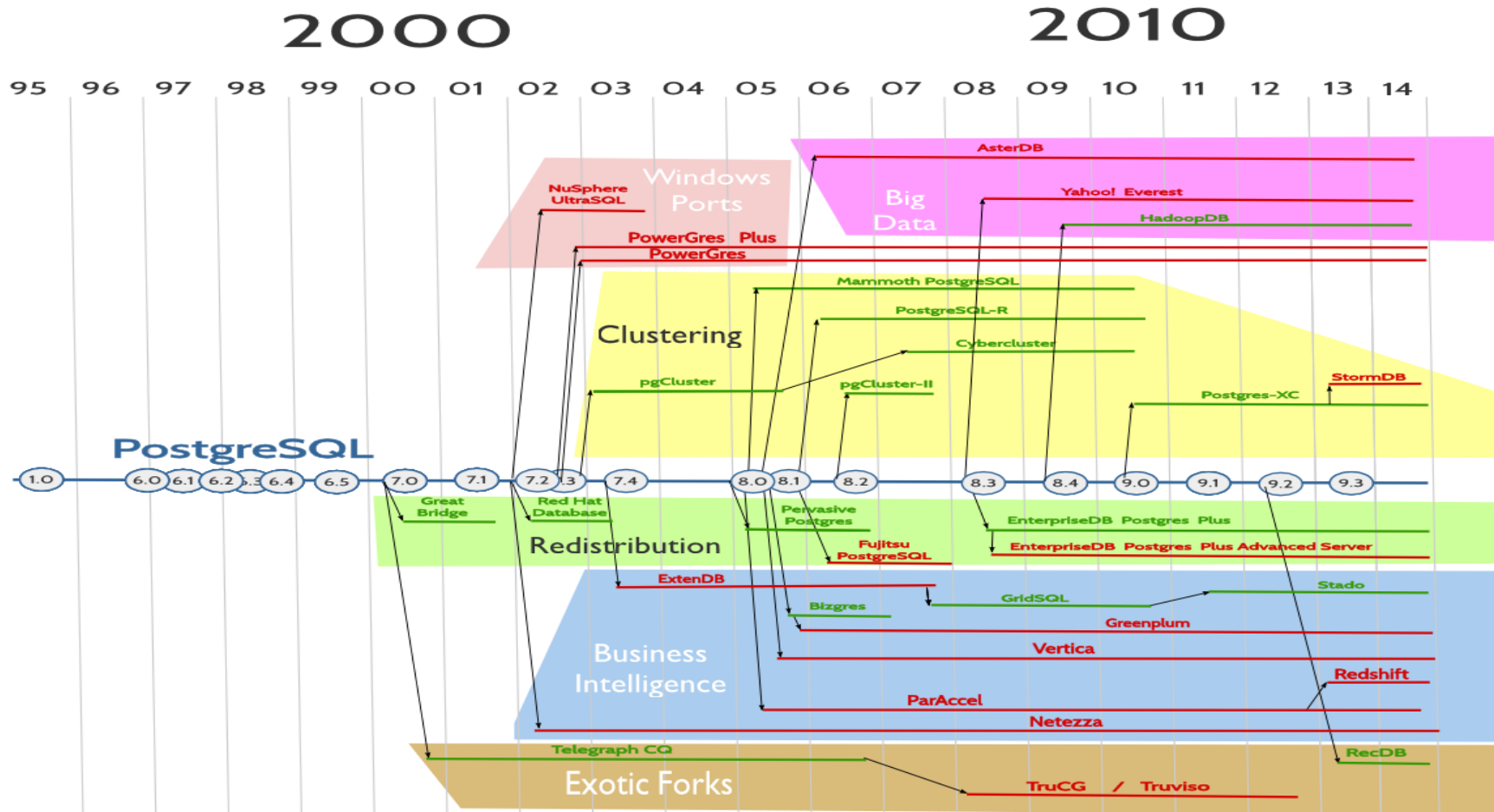
Support / sponsors



So why is this database so powerful?

- Open source project and quality source code
- Immunity to over-deployment – BSD license
- Professional support
- Low maintenance and tuning requirements
- Reliability and stability
- Excellent performance
- Designed for high volume environments
- Extensible
- Cross platform
- Command line & GUI database design and administration tools

Time Line PostgreSQL



PostgreSQL Saat Ini

Comparison: PostgreSQL, Postgres-XC, Postgres-XL

PostgreSQL	Postgres-XC	Postgres-XL
Open source SQL database for Enterprises	Open source SQL database for Enterprises	Open source SQL database for Enterprises
	Large coverage of PostgreSQL support	Large coverage of PostgreSQL support
—	Global MVCC Consistency	Global MVCC Consistency
—	—	MPP query support
—	—	Performance improvements
—	—	Multi-tenant security

Links

- download : <http://www.postgresql.org/ftp/source/>