

# PostgreSQL: Past, Present, and Future

BRUCE MOMJIAN



POSTGRESQL has deep roots, a wide user base, and a bright future.

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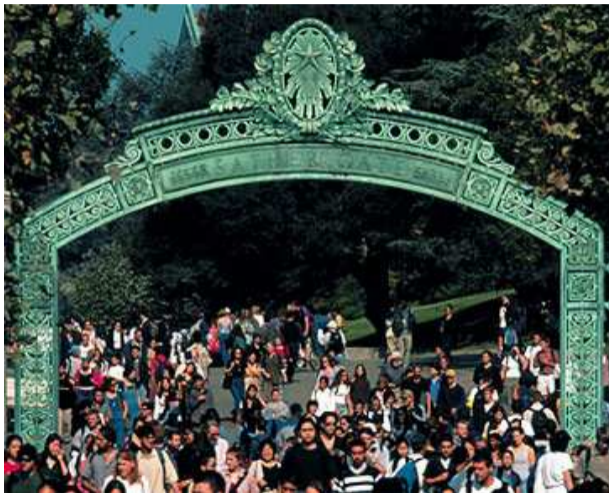


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*Last updated: June 2023*

# PostgreSQL Past

# The University of California at Berkeley





Michael Stonebraker



Jolly Chen and Andrew Yu

# PostgreSQL Code Base History

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

# PostgreSQL Through the Years

1977–1985 Ingres

1986–1994 Postgres

1994–1995 Postgres95

1996– PostgreSQL

## Release Dates and Sizes Before 2000

| version | reldate    | months | relnotes | lines  | change | % change |
|---------|------------|--------|----------|--------|--------|----------|
| 1.0     | 1995-09-05 | 18     |          | 172470 | -78402 | -31      |
| 1.01    | 1996-02-23 | 6      |          | 179463 | 6993   | 4        |
| 1.09    | 1996-11-04 | 8      |          | 178976 | -487   | 0        |
| 4.2     | 1994-03-17 |        |          | 250872 |        |          |
| 6.0     | 1997-01-29 | 3      |          | 189399 | 10423  | 5        |
| 6.1     | 1997-06-08 | 4      |          | 200709 | 11310  | 5        |
| 6.2     | 1997-10-02 | 4      |          | 225848 | 25139  | 12       |
| 6.3     | 1998-03-01 | 5      |          | 260809 | 34961  | 15       |
| 6.4     | 1998-10-30 | 8      |          | 297918 | 37109  | 14       |
| 6.5     | 1999-06-09 | 7      |          | 331278 | 33360  | 11       |

## Release Dates and Sizes After 2000

| version | reldate    | months | relnotes | lines   | change | % change |
|---------|------------|--------|----------|---------|--------|----------|
| 7.0     | 2000-05-08 | 11     |          | 383270  | 51992  | 15       |
| 7.1     | 2001-04-13 | 11     |          | 410500  | 27230  | 7        |
| 7.2     | 2002-02-04 | 10     | 250      | 394274  | -16226 | -3       |
| 7.3     | 2002-11-27 | 10     | 305      | 453282  | 59008  | 14       |
| 7.4     | 2003-11-17 | 12     | 263      | 508523  | 55241  | 12       |
| 8.0     | 2005-01-19 | 14     | 230      | 654437  | 145914 | 28       |
| 8.1     | 2005-11-08 | 10     | 174      | 630422  | -24015 | -3       |
| 8.2     | 2006-12-05 | 13     | 215      | 684646  | 54224  | 8        |
| 8.3     | 2008-02-04 | 14     | 223      | 762697  | 78051  | 11       |
| 8.4     | 2009-07-01 | 17     | 314      | 939098  | 176401 | 23       |
| 9.0     | 2010-09-20 | 15     | 237      | 999862  | 60764  | 6        |
| 9.1     | 2011-09-12 | 12     | 203      | 1069547 | 69685  | 6        |
| 9.2     | 2012-09-10 | 12     | 238      | 1148192 | 78645  | 7        |
| 9.3     | 2013-09-09 | 12     | 177      | 1195627 | 47435  | 4        |
| 9.4     | 2014-12-18 | 15     | 211      | 1261024 | 65397  | 5        |
| 9.5     | 2016-01-07 | 13     | 193      | 1340005 | 78981  | 6        |
| 9.6     | 2016-09-29 | 9      | 214      | 1380458 | 40453  | 3        |



# PostgreSQL Tenth Anniversary in 2006



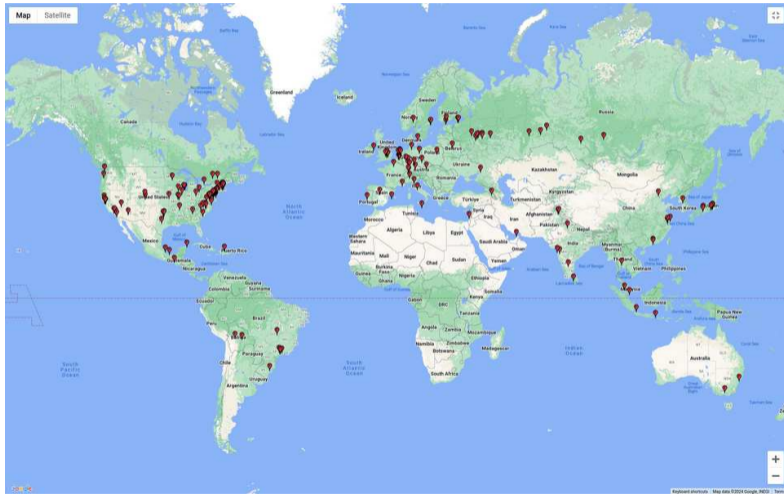
[https://www.postgresql.org/files/community/conference06/conference\\_group.html](https://www.postgresql.org/files/community/conference06/conference_group.html)

# PostgreSQL Present

# Postgres User Coverage

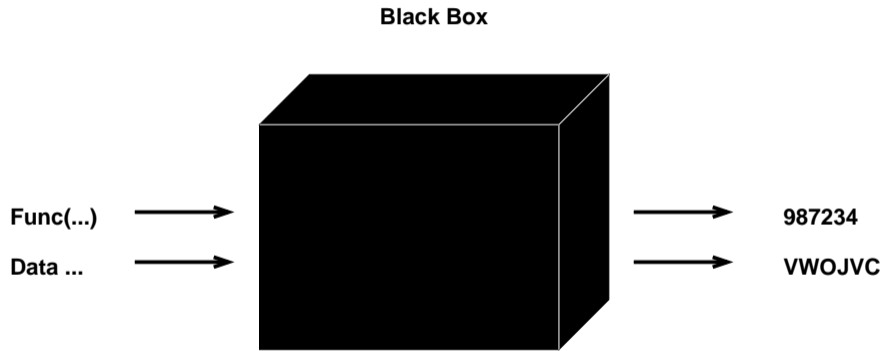
- All industry sectors
- All organization sizes
- All database sizes

# My Postgres Activities

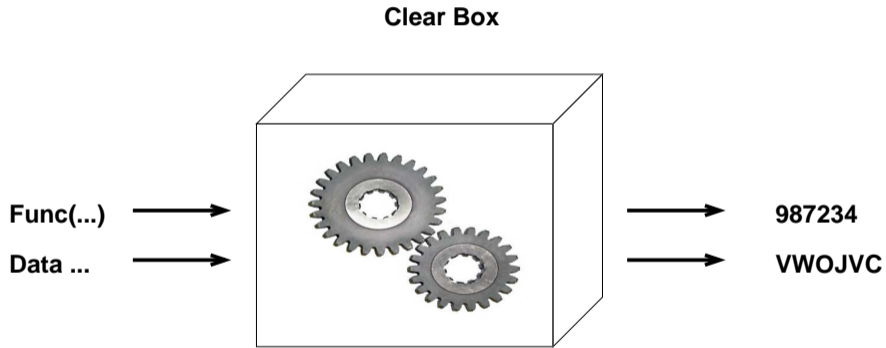


# Why Users Choose PostgreSQL

# Closed-Source Software



# Open-Source Software



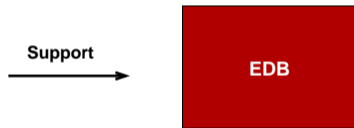
# Support of Closed-Source Software

**Support**  
→

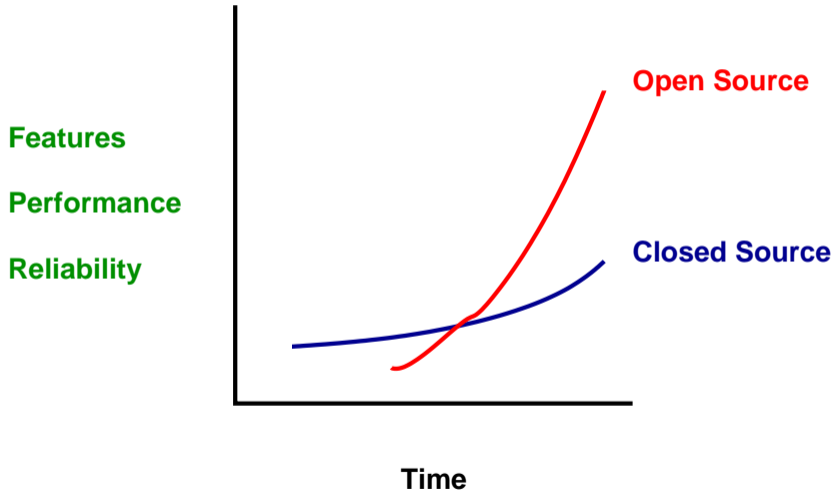
Database  
Company



# Support of Open-Source Software



# The Future of Open Source

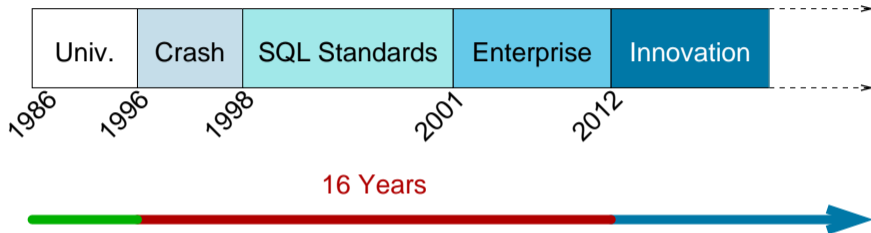


# Postgres Advantages

- Cost
- Easy administration
- Powerful development environment
- Flexibility
- Reliability
- Open license

# PostgreSQL Future

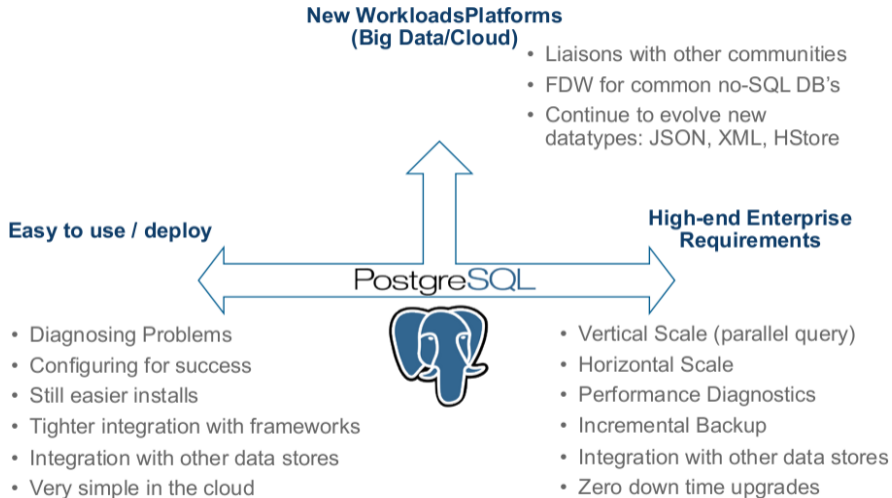
# PostgreSQL Evolution



Innovation includes:

- Application-specific data types, e.g., JSON, PostGIS, range types
- Advanced index types, e.g., GIN, SP-GiST
- Single and multi-node scalability

# Three Focuses



# Conclusion



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