

# PostgreSQL: Past, Present, and Future

BRUCE MOMJIAN



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

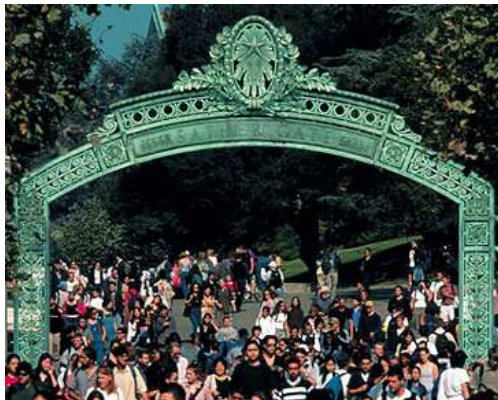
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# PostgreSQL Past

# 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

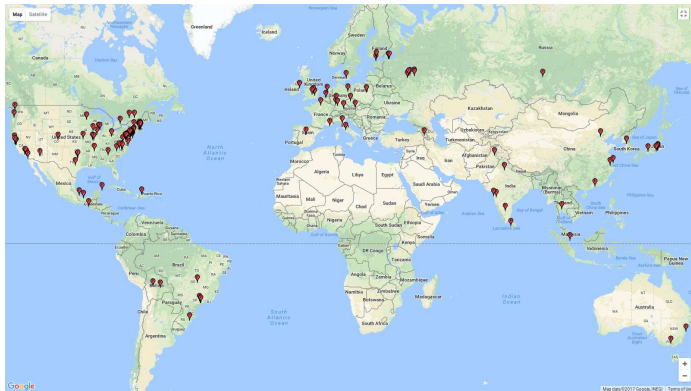


# PostgreSQL Present

# Postgres User Coverage

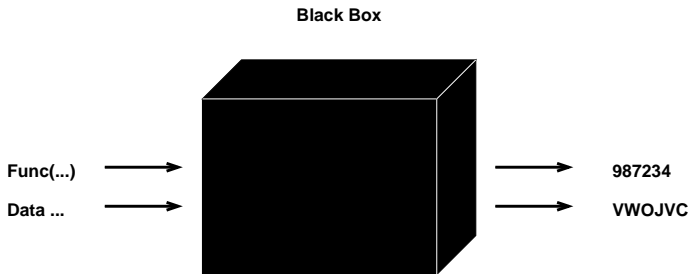
- ▶ All industry sectors
- ▶ All organization sizes
- ▶ All database sizes

# My Postgres Activities

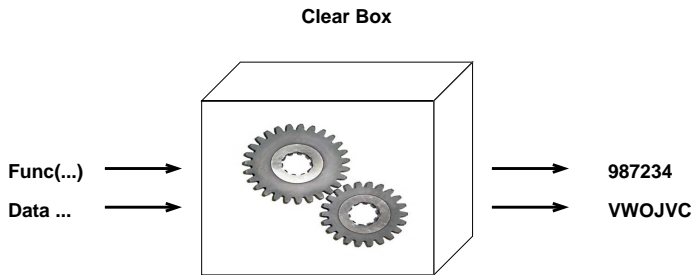


# Why Users Choose PostgreSQL

# Closed-Source Software



# Open-Source Software



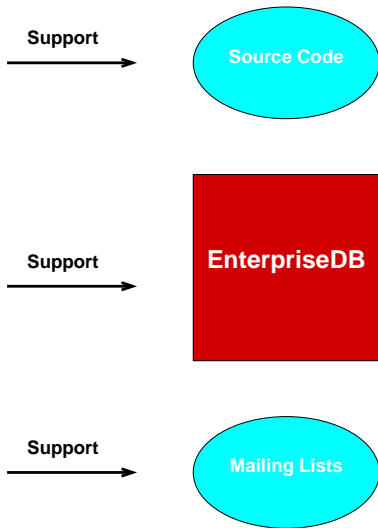
# Support of Close-Source Software

**Support**  
→

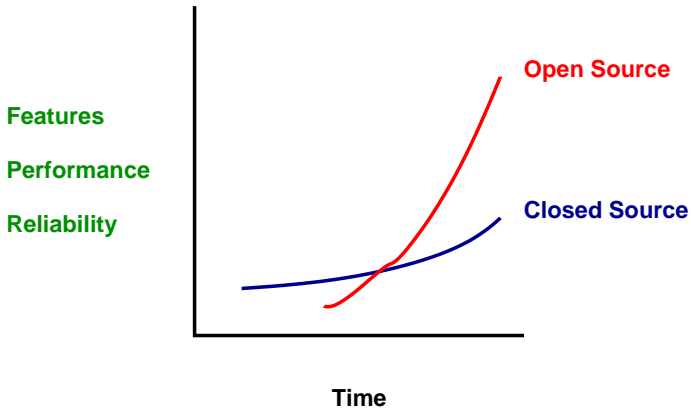
**Database  
Company**



# Support of Open-Source Software



# The Future of Open Source

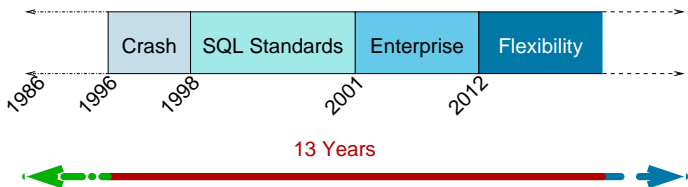


# Postgres Advantages

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

# PostgreSQL Future

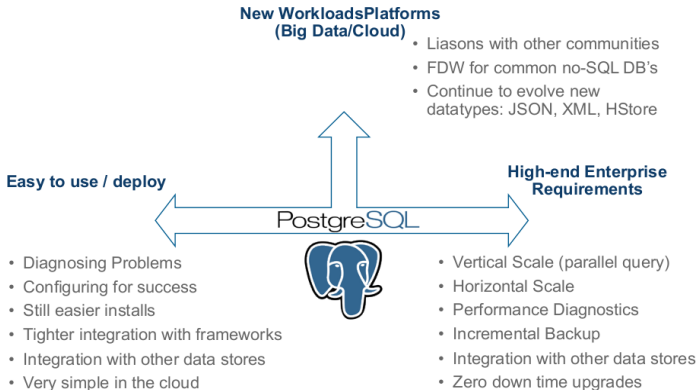
# PostgreSQL Evolution



Flexibility 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



*Keith Alsheimer, EnterpriseDB*

# Conclusion



*<http://momjian.us/presentations>*