



PostgreSQL Community

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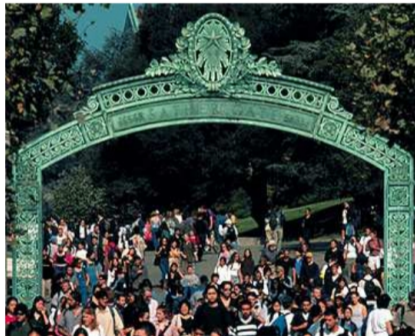
AWS
March 04, 2025

PostgreSQL Community

- History
- Community
- Development Process
- Contribution



University of California Berkeley



Courtesy: Bruce Momjian



History: INGRES

- 1974 – 1985: University INGRES
 - Interactive Graphics REtrieval System
 - Prototype of a relational DBMS
 - University of California at Berkeley
 - Prof. Stonebraker
 - Spawned commercial databases: Sybase, MSSQL, NonStop SQL, others
- 1980 – Present: Commercialization
 - Commercial success
 - Relational Technologies ⇒ Ingres Corp.
⇒ Computer Associates ⇒ Ingres Corp. ⇒ Actian
- 2006 – Present: Open Source



History: POSTGRES

- 1986 – 1994: University POSTGRES
 - "Post Ingres"
 - University of California at Berkeley
 - Prof. Stonebraker
 - Prototype of an object-relational DBMS
 - POSTQUEL query language
 - Spawned commercial databases: Illustra ⇒ Informix, others



History: PostgreSQL

- 1994 – 1995: Postgres95
 - University of California at Berkeley
 - Andrew Yu and Jolly Chen
 - Conversion to SQL
 - More liberal license
- 1996 – present: PostgreSQL
 - Open-source project
 - PostgreSQL Global Development Group
 - Spawned many [derived products](#)



Originators

Postgres



Michael Stonebraker

Postgres95



Jolly Chen and Andrew Yu

Courtesy: Bruce Momjian



First Core Team + Jolly and Andrew



Top row: Thomas Lockhart, Jolly Chen, Vadim Mikheev
Jan Wieck, Andrew Yu, Tom Lane
Bottom row: Bruce Momjian, Marc Fournier



PostgreSQL 10 Year Anniversary Summit - 2006



Courtesy: Alvaro Herrera



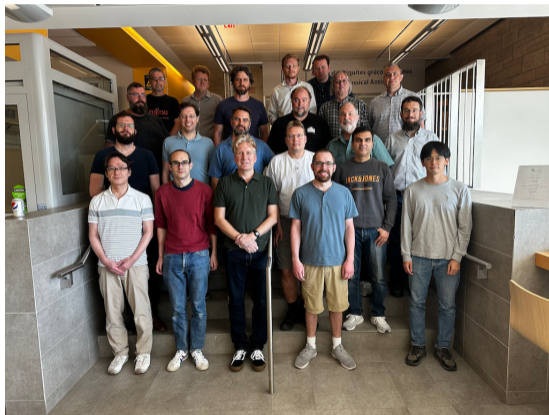
First PGCon - 2007



Courtesy: Michael Glaesemann



PGCon Developer Meeting - 2023



Courtesy: Dave Page



PostgreSQL Community

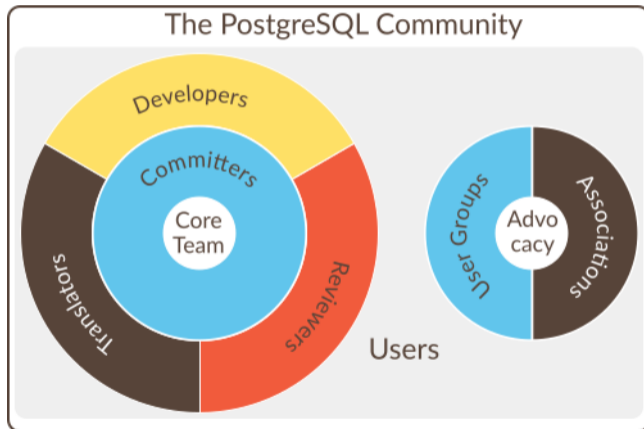


Diagram Courtesy of Lætitia Avrot



PostgreSQL Versioning

- Old Versioning scheme
 - Up to version 9.6
 - Three segments
 - Major X.Y (e.g. 9.6)
 - Minor X.Y.Z (e.g. 9.6.8)
- New Versioning scheme
 - Starting with version 10
 - Only two segments
 - Major X (e.g. 16)
 - Minor X.Z (e.g. 16.1)



PostgreSQL Supported Releases

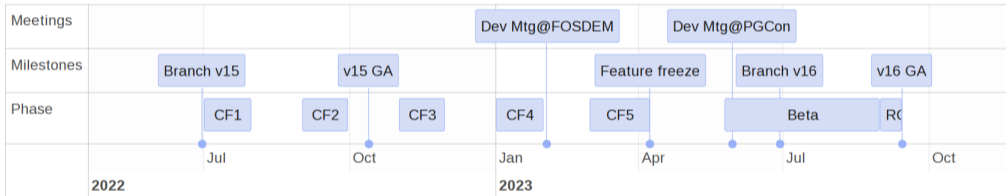
- Major versions are supported by the community for about 5 years
- [Support Matrix](#)

Vers	First Minor Release	Final Minor Release
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v17	September 26, 2024	November 08, 2029
v16	September 14, 2023	November 09, 2028
v15	October 13, 2022	November 11, 2027
v14	September 30, 2021	November 12, 2026
v13	September 24, 2020	November 13, 2025
v12*	October 03, 2019	November 14, 2024
v11*	October 18, 2018	November 09, 2023
v10*	October 05, 2017	November 10, 2022

* Covered by AWS Extended Support



PostgreSQL Development Cycle



Commitfests

- [Commitfest App](#)
- CF-entries:
 - Patch or set of patches
 - Implements some goal
 - Proposed for inclusion
 - One or more authors/reviewers
 - Examples: new feature, bugfix, refactoring, improved docs



Commitfests

- Goals:
 - Patches do not get lost
 - Reviewers/committers can quickly find patches deserving attention
 - Single place tracking discussion and documenting state of CF-entries
 - Encourage:
 - people review other people's patches
 - review patches proportionally to patches submitted



Commitfests

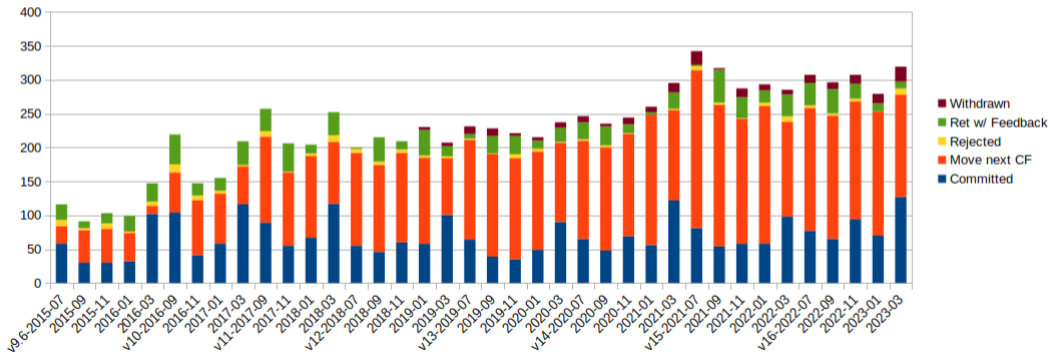
- Last Commitfest:
 - CF before the expected feature freeze date
 - Extra restrictions:
 - No nontrivial CF-entries unless previously submitted to earlier CF
 - CF-entries deemed unlikely to finish in last CF aggressively be moved early



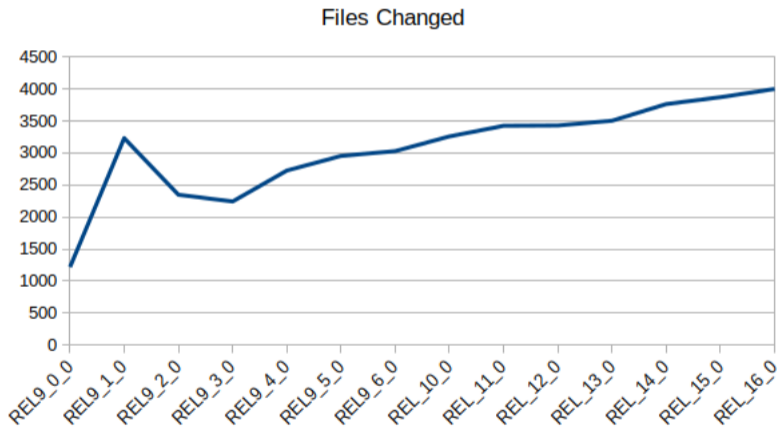
Commitfests

PostgreSQL Commitfest

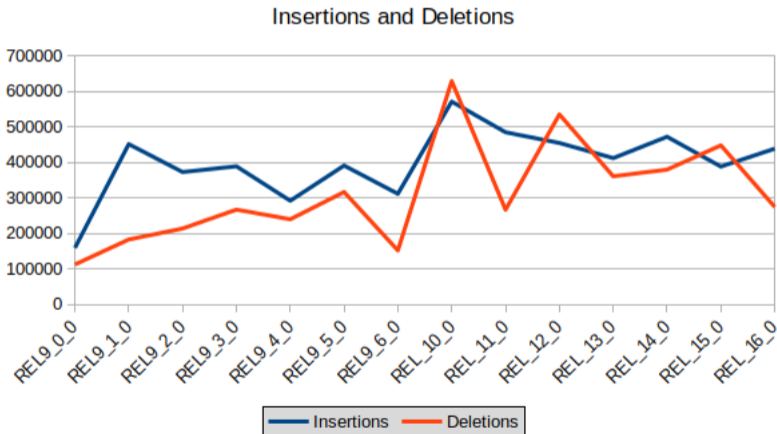
Patches Processed



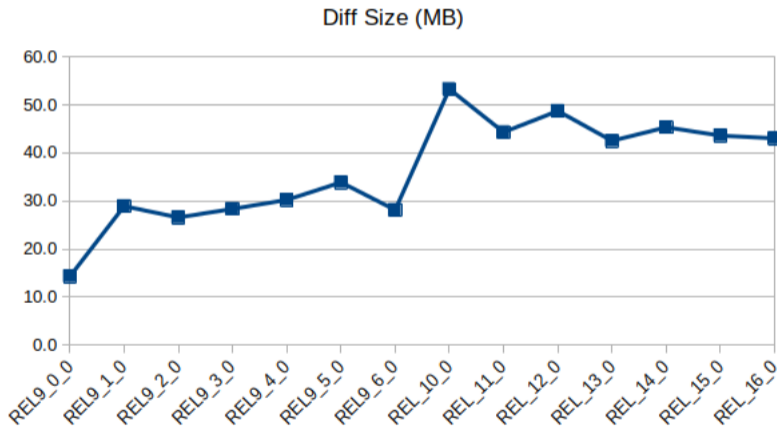
Major Release Stats



Major Release Stats



Major Release Stats



What Constitutes Contribution?

Core Engine Code



What Constitutes Contribution?

What Else?



What Constitutes Contribution?

- Contribution Activities
 - Governance
 - Infra Ops
 - Releases
 - NPOs
 - Conferences
 - Moderation
 - Committees
 - Blogs
 - Books
 - Training
 - Support



What Constitutes Contribution?

- Contribution Activities
 - Features
 - Fixes
 - Drivers
 - Extensions
 - Patch review
 - Testing
 - Security
 - Performance/Benchmarking
 - Packaging
 - Documentation
 - Translation
 - Development/commitfest discussions



What Constitutes Contribution?

- Related projects
 - PostGIS
 - pgjdbc
 - pgjdbc
 - pg_tle
 - pgvector
 - pg_hint_plan
 - others...



Contributor Categories

- Community Principals
 - Core team
 - SysAdmin team
 - Committers
- Officially Recognized Contributors
 - Major Contributors
 - Contributors
 - Past Major Contributors
 - Past Contributors



Contributor Categories

- Acknowledged Contributors
 - Non-trivial size/number of commits to major related projects (e.g. PostGIS, JDBC)
 - Listed on release notes in previous releases (e.g. [v17](#), [v16](#), [v15](#), [v14](#), [v13](#))
 - Attribution in the main PostgreSQL git repository in several commit messages over an extended period of time; e.g. [Tom Lane](#)



Contributor Categories

- Commitfest Participants
 - Authors
 - Reviewed-by
 - Tested-by
 - Reported-by
 - Commitfest Manager (CFM)



Contributor Categories

- Non Profit Organizations, e.g. [PgUS](#), [PGEU](#), [PGCA](#), [SPI](#)
 - Board of Directors
 - Officers
 - Committees
 - Members
 - Donors



Contributor Categories

- Conferences
 - Organizers
 - Selection Committees
 - Volunteers
 - Sponsors
 - Speakers
 - Attendees



Contributor Categories

- Other
 - Release Management Team (RMT)
 - Release Team
 - PGDG Packagers



Core Team (Overall Governance)

- Core team
 - Bruce Momjian - EDB
 - Dave Page - pgEdge
 - Peter Eisentraut - EDB
 - Jonathan Katz - AWS
 - Andres Freund - Microsoft
 - Tom Lane - Crunchy Data
 - Magnus Hagander - Redpill Linpro



Sysadmin Team (Infra Ops)

- [Sysadmin team](#)
 - Álvaro Herrera - EDB
 - Dave Page - pgEdge
 - Joe Conway - AWS
 - Magnus Hagander - Redpill Linpro
 - Stefan Kaltenbrunner - Conova
 - Christophe Pettus - PGX
 - Yogesh Sharma - AWS



Committers (Maintainers)

- Committers
 - Total 30 people
 - EDB - 6
 - AWS - 7
 - Microsoft - 7
 - Crunchy Data - 1
 - NTT - 2
 - Google - 1
 - Neon - 1
 - Fujitsu - 1
 - Other - 4



Code of Conduct Committee

- **CoC Committee**
 - Chris Travers - Delivery Hero
 - Sergei Kim - EPAM
 - Simon Pane - Pythian
 - Floor Drees - Independent
 - Hari Kiran - pgEdge
 - Michael Goldberg - Spot
 - Pavel Luzanov - Postgres Pro
 - Sonia Valeja - Percona



Security Team

- Security Team
 - 17 members
 - EDB - 5
 - AWS - 4
 - Crunchy Data - 1
 - Microsoft - 1
 - Neon - 1
 - Google - 1
 - Other - 4



Contributors Team

- Contributors Team
 - Christoph Berg - Cybertec
 - Joe Conway - AWS
 - Melanie Plageman - Microsoft



Sponsors Committee

- Sponsors Committee
 - Tatsuo Ishii - SRA OSS
 - Jonathan Katz - AWS
 - Ilya Kosmodemiansky - Data Egret
 - Dave Page - pgEdge
 - Robert Treat - AWS



Questions?

Thank You!
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