

## Postgres-XC Roadmap

May 20<sup>th</sup>, 2014



## Release 1.3

- Coordinator and Datanode Merge
- GTM and GTM-proxy Merge
- GTM and Coordinator Merge
- Merge with PG 9.4
- More Planner improvements
- Certify on DBT-5
- More PG compliance (support for WCO, Updatable cursors and more)
- Formal QA and automated test suite for XC cluster features
- Stabilization of GTM in various scenes
- Where Current Of
- pgxc\_ctl improvement for HA and more flexible cluster operation
- Important fixes: random failure in regression (#311) and statement stuck at Execute Direct (#427)



## Postgres-XC Architecture in Release 1.3

- Integrate all the components into single binary and nodes
  - Simpler planning, configuration and maintenance.
  - Coordinator and Datanode integrated into single backend.
  - GTM and GTM Proxy as postmaster child process.
    - Could be user-backend.
- Both stand-alone and cluster mode
  - Stand-alone: PostgreSQL compatible (no restriction).
  - Cluster mode: Behaves like Postgres-XC 1.2 (with new feature).
- May share resources with postmaster
  - Port and directory



## Feature beyond

- Installation/configuration/operation/HA improvement
- Statistics
  - More than two table join optimization
- Global deadlock detection
- Global constraints
  - Unique/referential constraint among distributed tables.
- View privilege
- Range and list distribution
- Distribution column update
- Concurrent row redistribution (ALTER TABLE)
- Savepoint
- Barrier improvement (prepare synchronization for explicit 2PC)