



A Postgres lifestyle @ ZeroDha

Presented by



Context.


- Our learnings are our learnings, none of your learnings.
- You might disagree or be



- No jokes. Not even PG 13 ones.



A little bit about me.

- Been at Zerodha since day 1 of Tech team as the 10x  engineer.
- Managing backend of various database systems at Zerodha
- Yet to come across something as resilient as Postgres.



A history of Postgres usage in Zerodha

- We started with around 100 MB of data being imported daily, with Postgres 8.
- We failed at scaling even at that scale due to poor understanding of data, and the database.
- We currently deal with around 100s of GBs of imports daily.



How do we manage big(?) data

- Index but don't overdo it.
- Materialized Views ftw!
- Understanding your data better
- Delete unnecessary data points.
- Postgres db tuning around queries.
- Denormalize.
- Understand your query planner and direction of your queries.
- Regular vacuuming.



Using Postgres as a caching layer.

- Usage of our open source library Sqljobber
- Uses postgres as a caching layer on top of our primary postgres DB, and supports sorting, and search.
- Creates millions of tables every day.



Our learnings with Postgres.

- Having a hard limit how fast a query should be helps in improving schemas, tunings and query.
- Most heavy queries should be behind an async setup.
- There is no glory in storing too much data.
- Overloading postgres to make it do computations for you.
- Usecase of fdb wrapper.
- Sometimes postgres might not be the answer.
- Stay whelmed.



Thank you. (and questions?)

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