

Community Panel – Postgres at Scale: Dealing With Challenging Workloads

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Topics

- Very large datasets / tables
- High transaction rate
- Extreme concurrency
- Problematic data types
- Applications using anti-patterns

Very large datasets

- What is “very large”?
- Transactional vs analytical workloads
- Partitioning / Sharding

Very high transaction rate

- Read only transactions
- Write transactions
- Offloading
- Batching



Extreme concurrency

- Number of clients
- Connection pooling



Problematic data types

- Vectors
- GIS
- JSON



Application anti-patterns

- Relational JSON
- Updating JSON elements
- Queues
- & MOAR!



Plugs

PGDay Chicago!

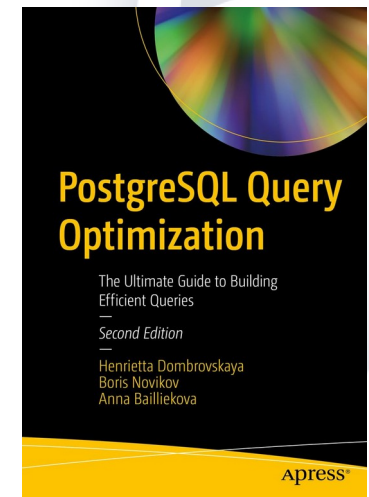
<https://2024.pgdaychicago.org>



PgDay Chicago
April 26, 2024

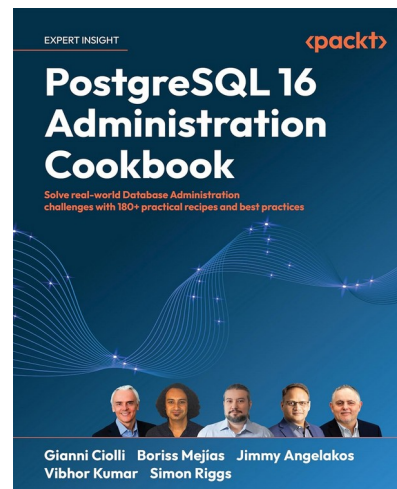
Book!

PostgreSQL Query Optimization



Book!

PostgreSQL 16 Administration Cookbook



PGConf.NYC!

<https://2024.pgconf.nyc>



Plugs

Postgres songs!

- Nothing Compares to VACUUM

https://youtu.be/2NxIngqq1y0?si=B9tRjerb_c0FPvDy

- EXPLAIN ANALYZE

<https://youtu.be/qznnzYZPdkM?si=G8GjpvcaTini8M9U>