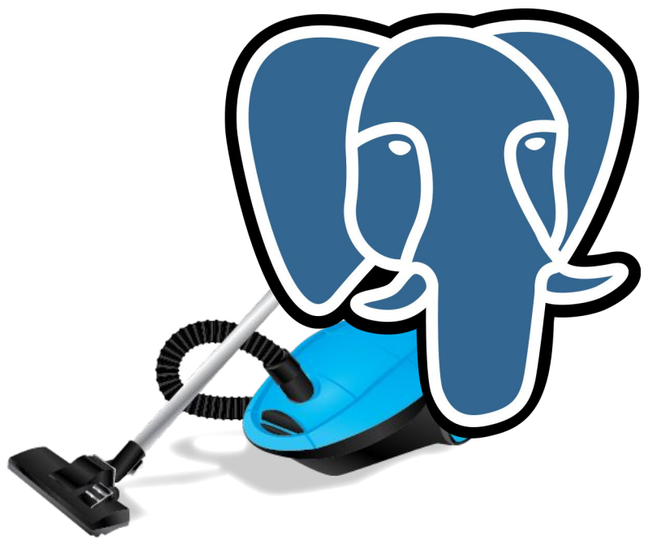
PGConf.dev 2025 PostgresPro



# VACUUM STATISTICS

Authors: Alena Rybakina
Lepikhov Andrei
Zubkov Andrey

#vacuum #monitoring
#vacuum_statistics

## What Is Vacuum In PostgreSQL?

√ Reclaims storage by cleaning up dead tuples
√ Prevents bloats
√ Maintains the visibility map
√ Avoids transaction wraparound

## The Challenge

X Cause excessive I/O and CPU load
X Degrade query performance
X Obscure strategic workload patterns

## Proposed Solution

Collects Vacuum statistics in the Cumulative Statistics System on a per-relation basis

- Buffer Statistics: hit, read dirties
- I\O Time: blk read time, blk write time
- Tuples count: dead tuples, removed tuples
- VM marks: removed all-visible and frozen
- Total time: user, system, delay
- Wraparound failsafe count

## Examples

```
SELECT * FROM pg_stat_vacuum_tables;
SELECT * FROM pg_stat_vacuum_indexes;
SELECT * FROM pg_stat_vacuum_database;
```