Advanced Distributed Architectures

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PostgreSQL Major Contributor

- pgloader, prefix, skytools, ...
- apt.postgresql.org
- CREATE EXTENSION
- CREATE EVENT TRIGGER
- MySQL migration tool, new pgloader version

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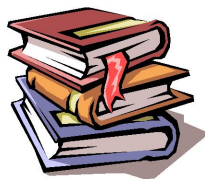**2ndQuadrant France**
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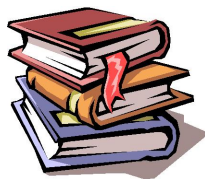
Glossary

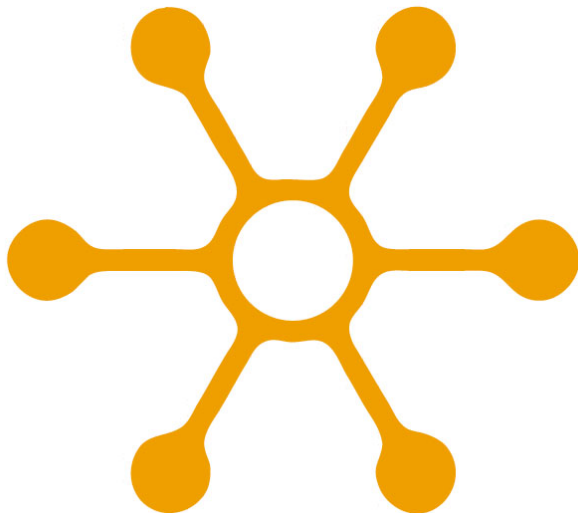Some vocabulary

- Clustering
- High-Availability
- Replication

Glossary

Some vocabulary

- Clustering
- High-Availability *of services or of data?*
- Replication

Distributed Architecture, aka *CLUSTER*

Glossary

Some vocabulary, *cont.*

- Architectures
- *Distributed Architectures*
- Shared Data
- Data Shards
- Load Balancing
- Write Scalability

Architectures

Software Architecture is about how to achieve **goals**

Tools
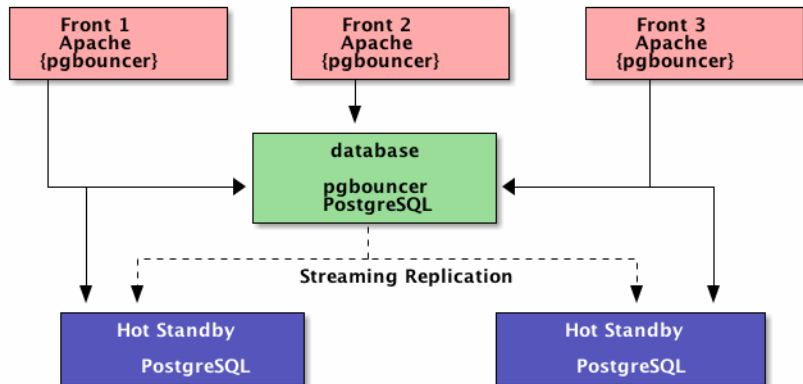
Replication is all about **tools**, not goals.

- Hot Standby
- Streaming Replication
- Cascading Replication
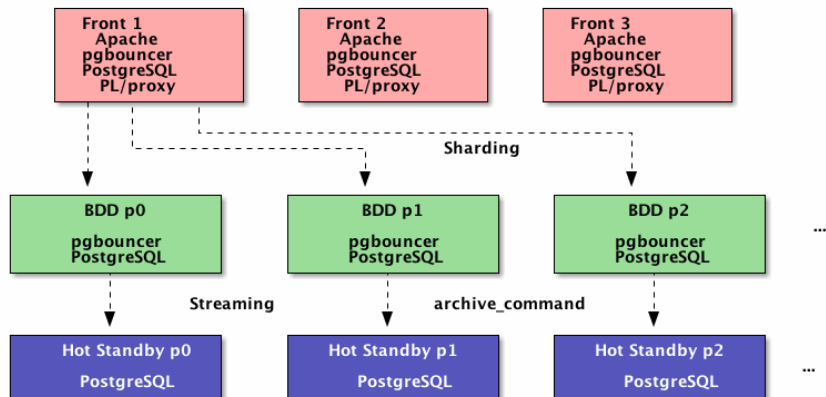- Skytools: londiste, PGQ

Architectures Examples

Load balancing reads: streaming replication

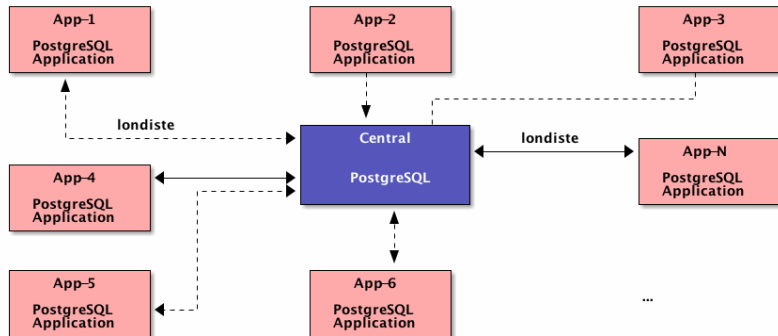# PGQ: efficient queueing in PostgreSQL

Load balancing writes: plproxy

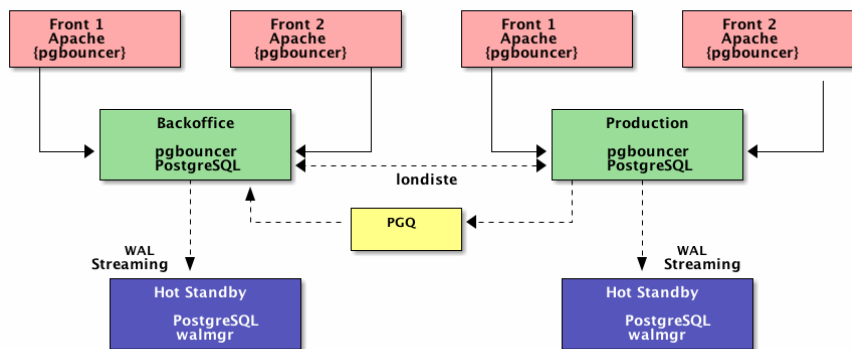# Multiple Active Nodes: federation

Multiple Active Nodes: federation

Multiple Active Nodes: split responsibility

Multiple Active Nodes: split responsibility

Questions?

Now is the time to ask!