Downtimeless PG upgrading

Thijs Lemmens







About me



- Working at Xenit since 2011:
 - Alfresco services
 - Products
- Big archiving use cases
- Strong interest in PostgreSQL



Outline



- Use case
- Physical Replication?
- Logical replication?
- PostgreSQL and logical replication
- Demo



Use case

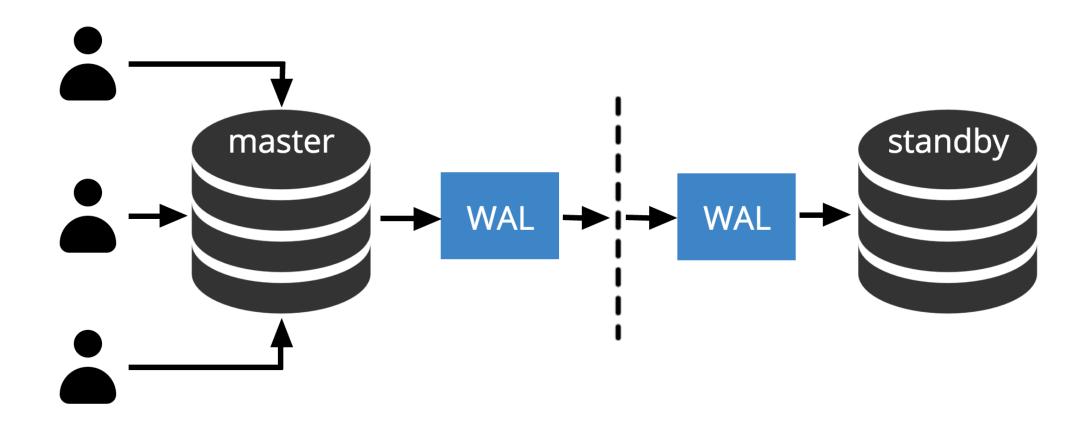


- Upgrading large DB's can take a long time
- System needs to be always on and writable
- Cloud applications
- Multinationals
- DBA's who like to sleep at night



Physical Replication?

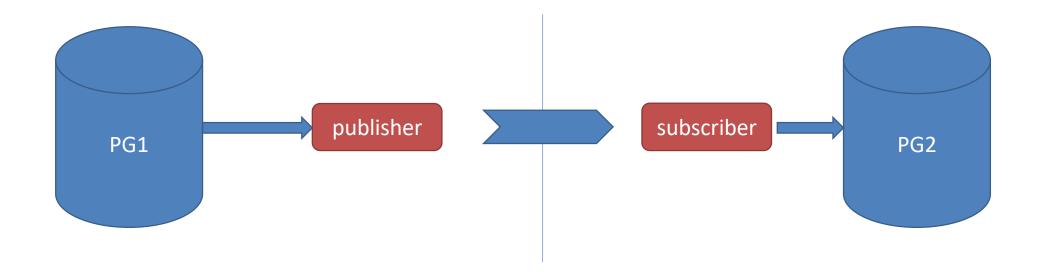






Logical replication?







Limitations

- No DDLS
- No Sequences
- Tables only



History

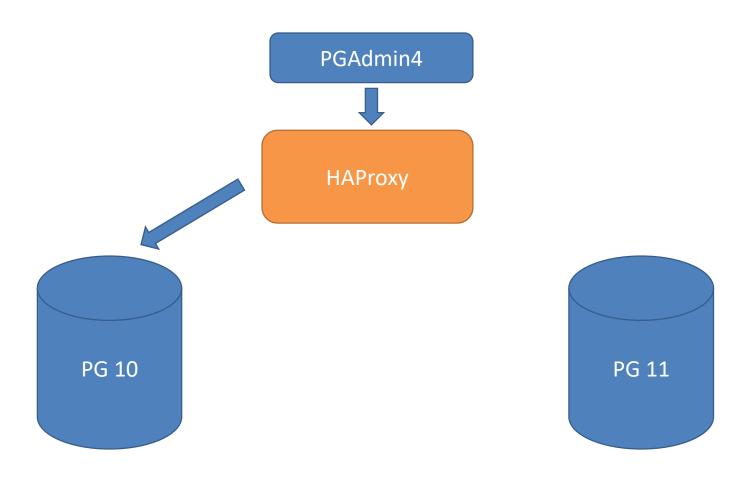


- Trigger based solutions
 - Slony
 - Londiste
- Pglogical extension
 - > PG 9.4
- Built in logical replication
 - Introduced in PG 10



Demo

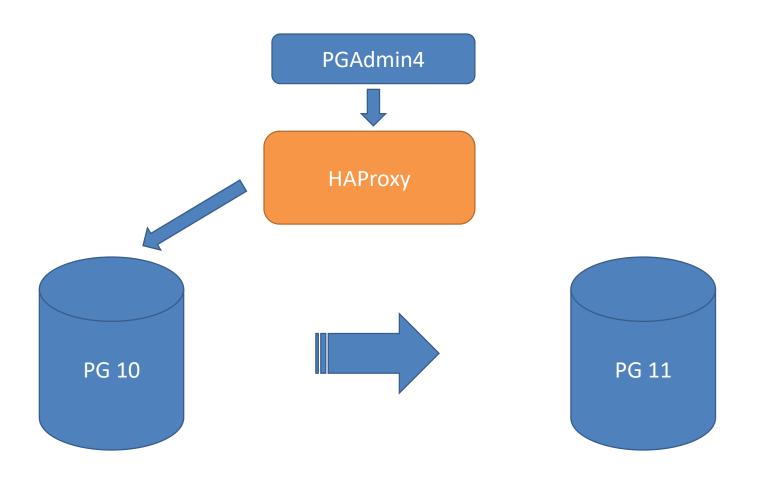






Demo

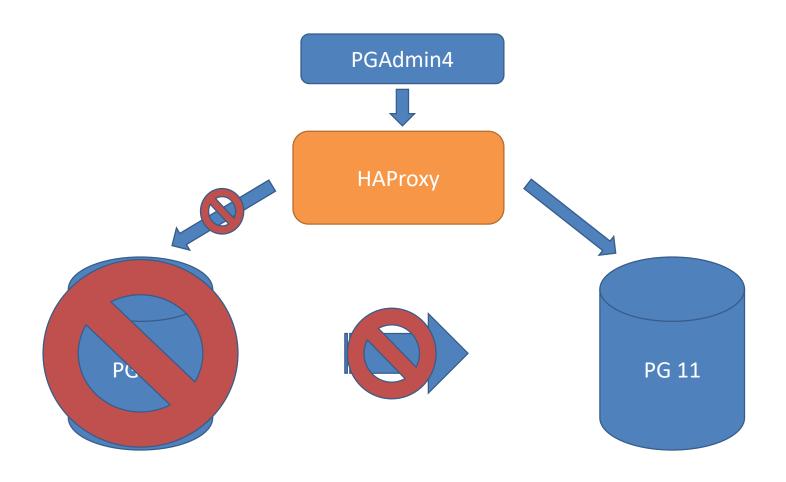






Demo







Do try this at home



https://github.com/thijslemmens/pg-logical-replication-presentation







