EDB Postgres Distributed

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Solution Architect
Air Guitar Player

BDR

EDB

Monica is in charge of Distributed Learning

Monica,

This is a mission critical project. The platform must be extremely-high available.

Forget about maintenance windows, and we want it active-active in both datacenters, Vlaanderen and Wallonie.

...and not expensive!

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Extreme High Availability

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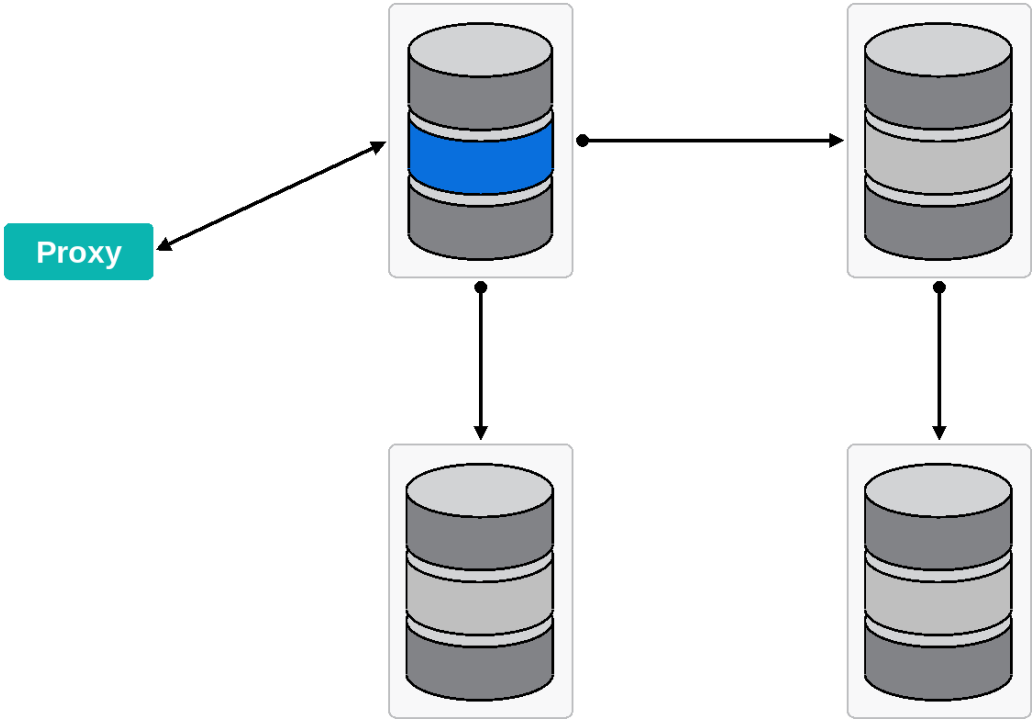
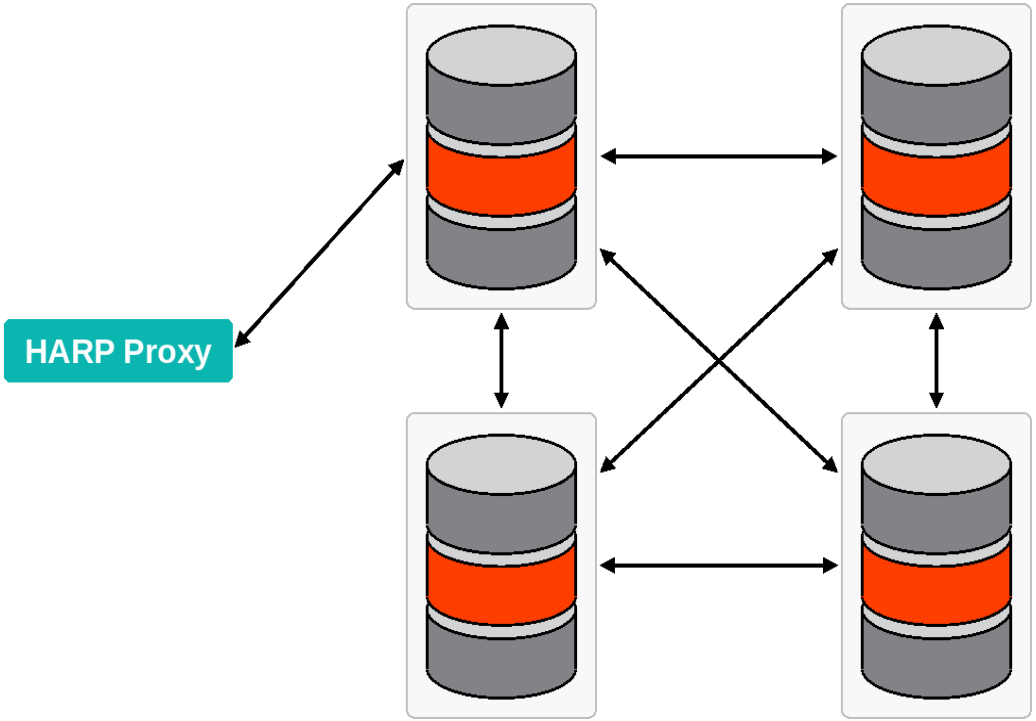
High Availability with Primary-Standby



Extreme High Availability with EDB PGD



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Postgres Distributed

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- Bi-Directional Replication → Active-Active
- DDL Replication
- Automatic conflict resolution
- Extremely fast switchover and failover

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A note on Logical Replication

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Postgres Logical Replication

Each table requires a replica identity

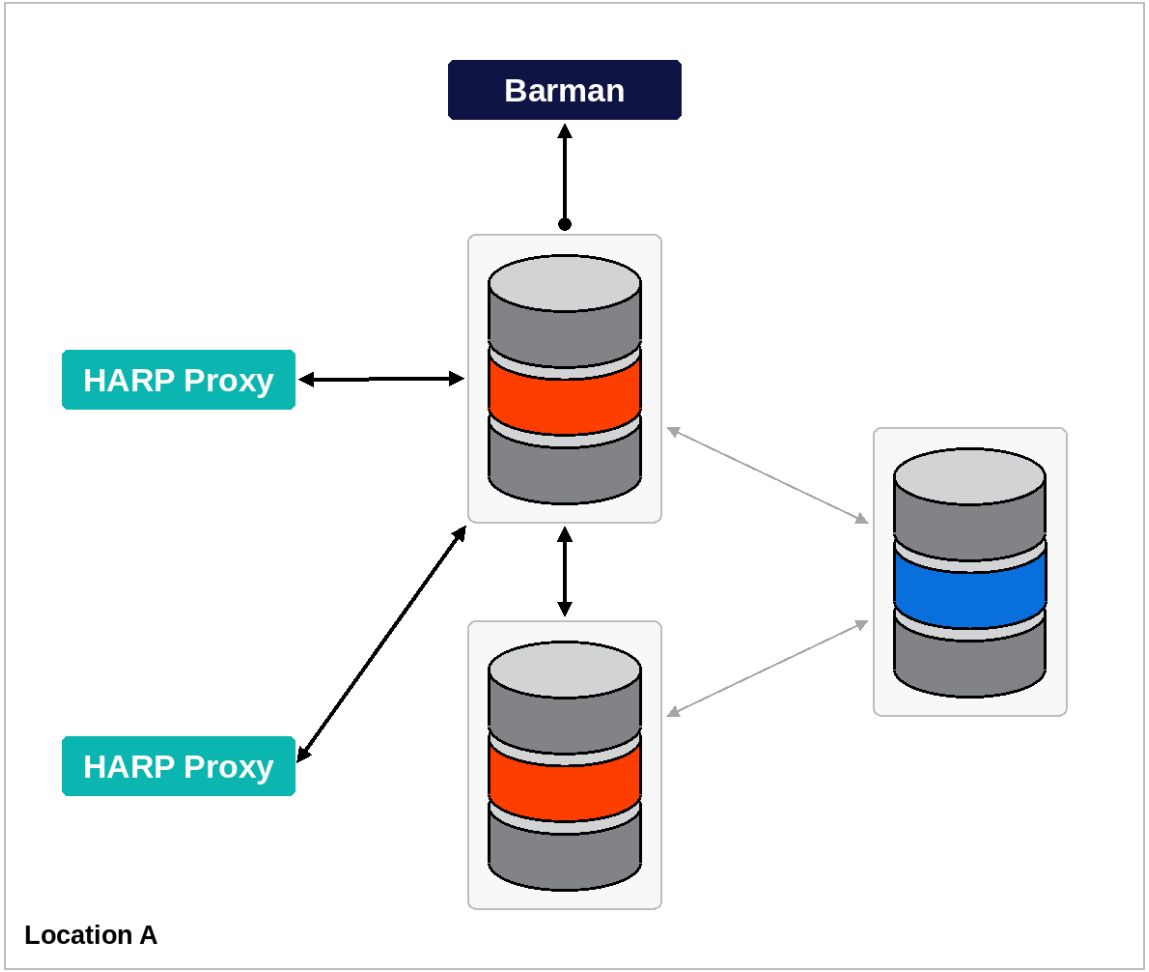
Only one database gets replicated

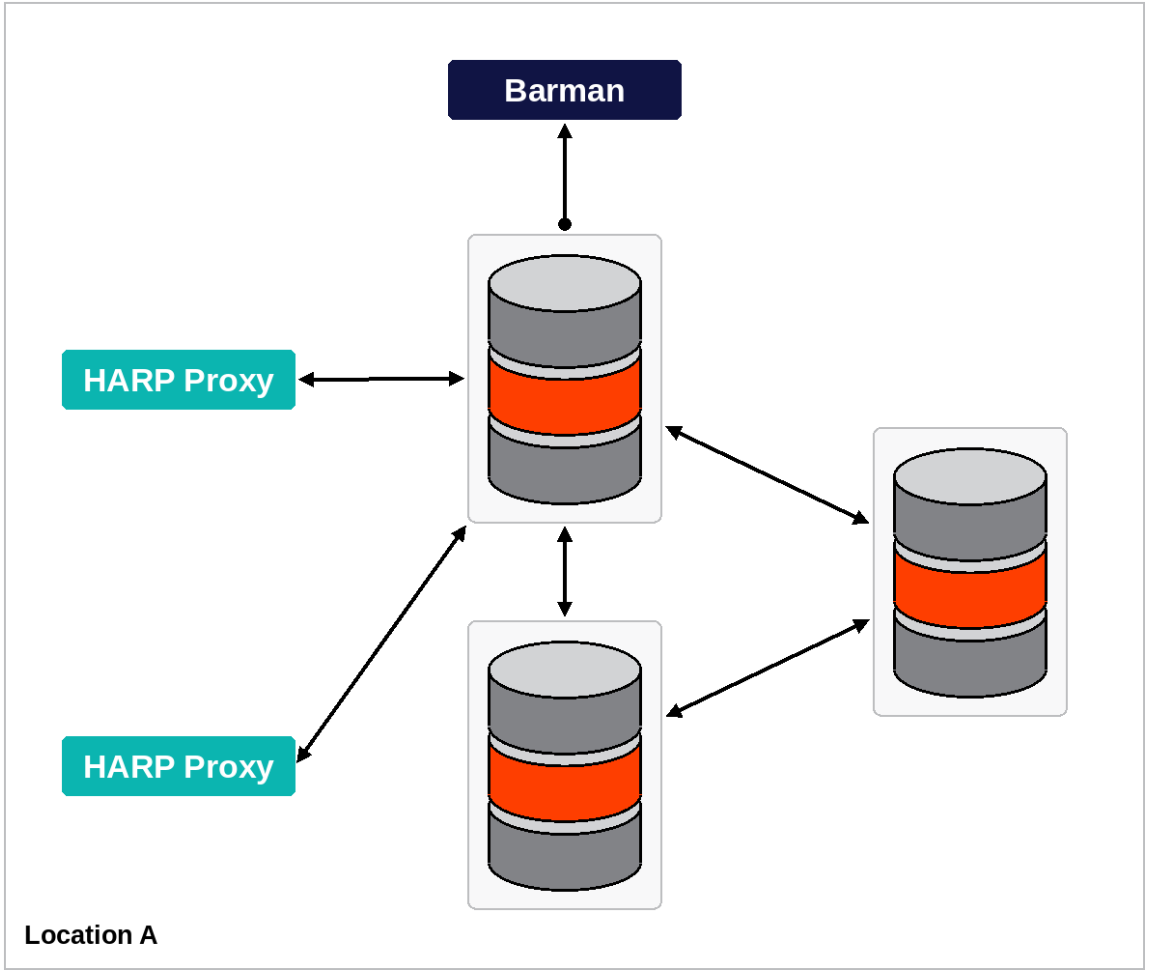
Very fast switchover and failover

DEMO

We observed failover in 6 seconds
and switchover in less than 0.5 seconds

Multiple architectural layouts


Barman
HARP Proxy
HARP Proxy
Location A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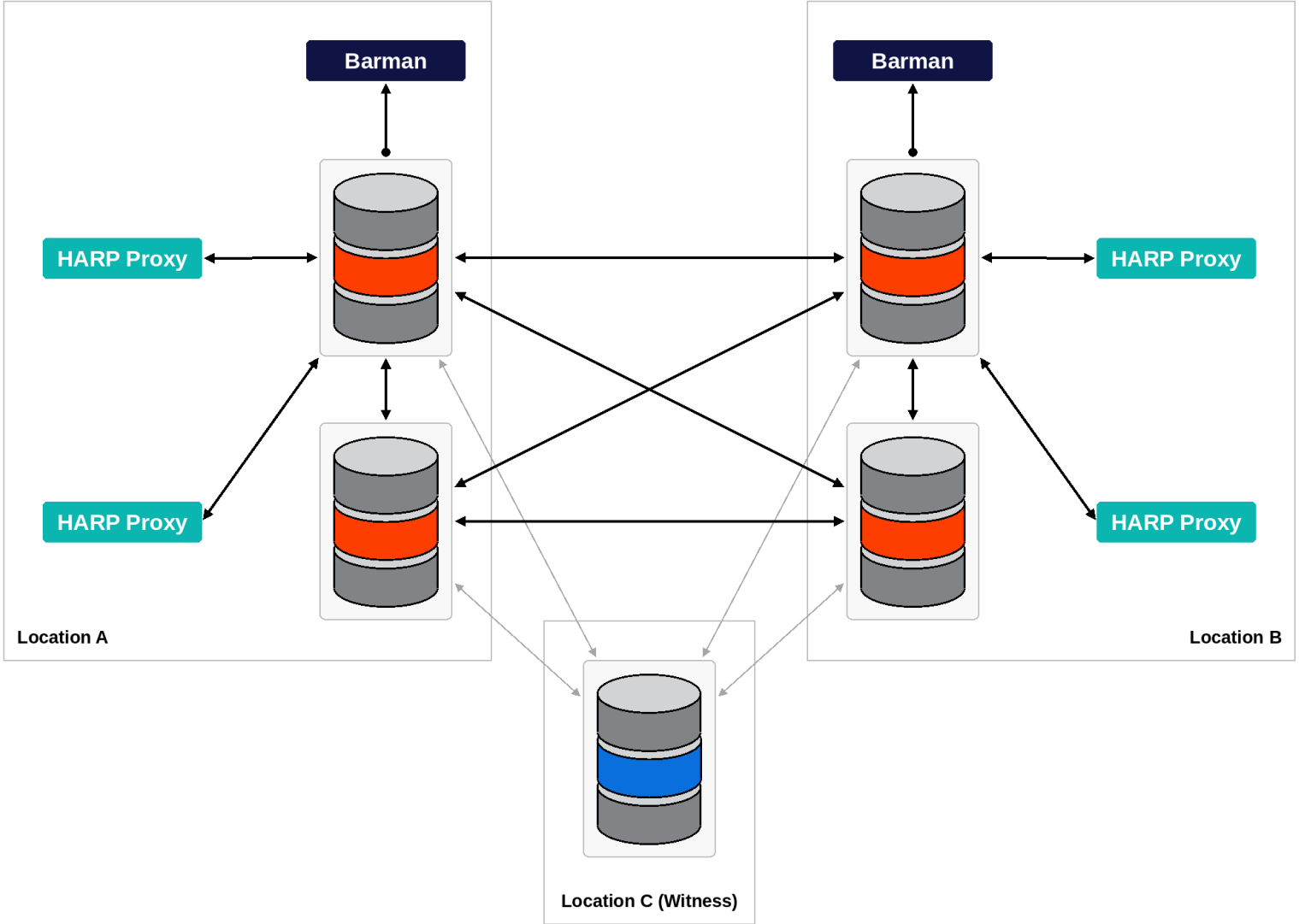
Barman
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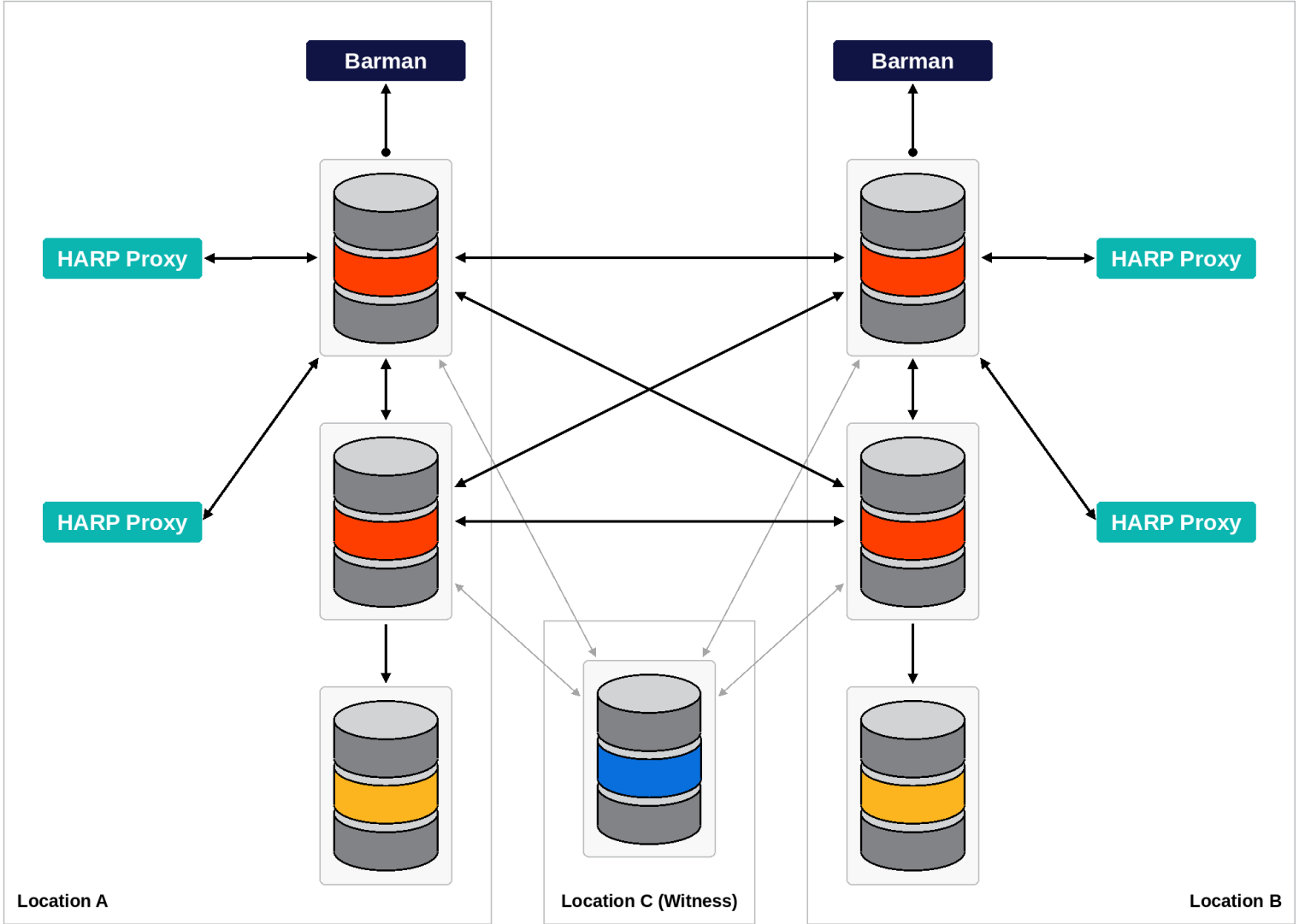
Location A
Location B
Location C (Witness)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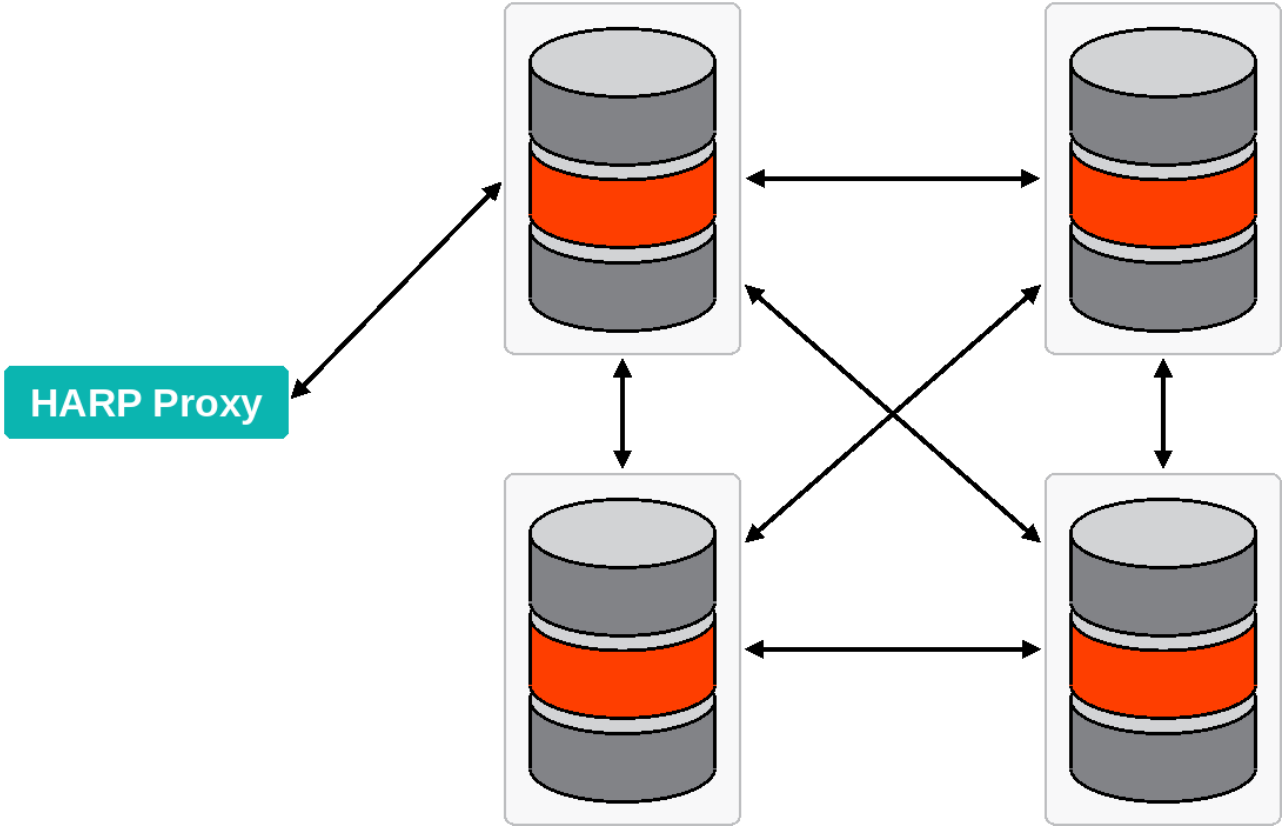
Location C (Witness)
Location B

Rolling Upgrades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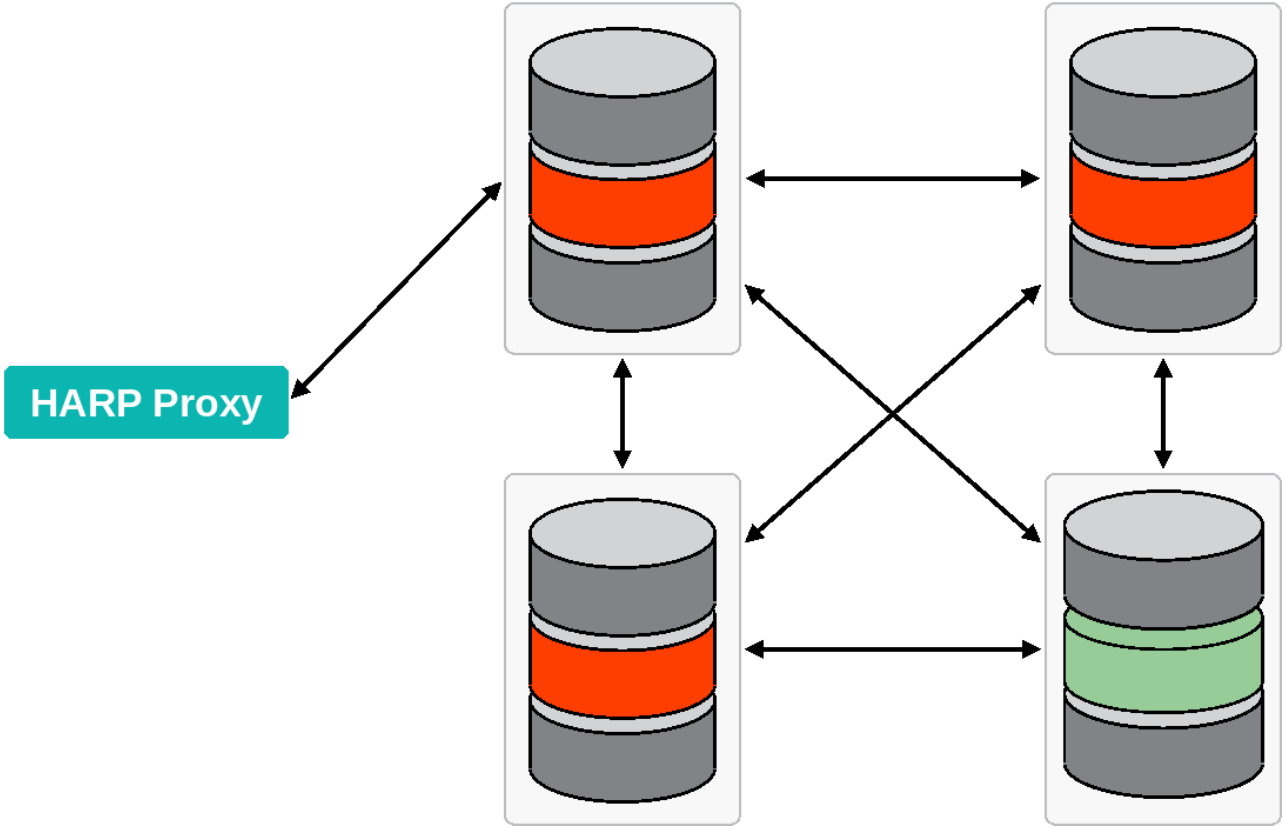
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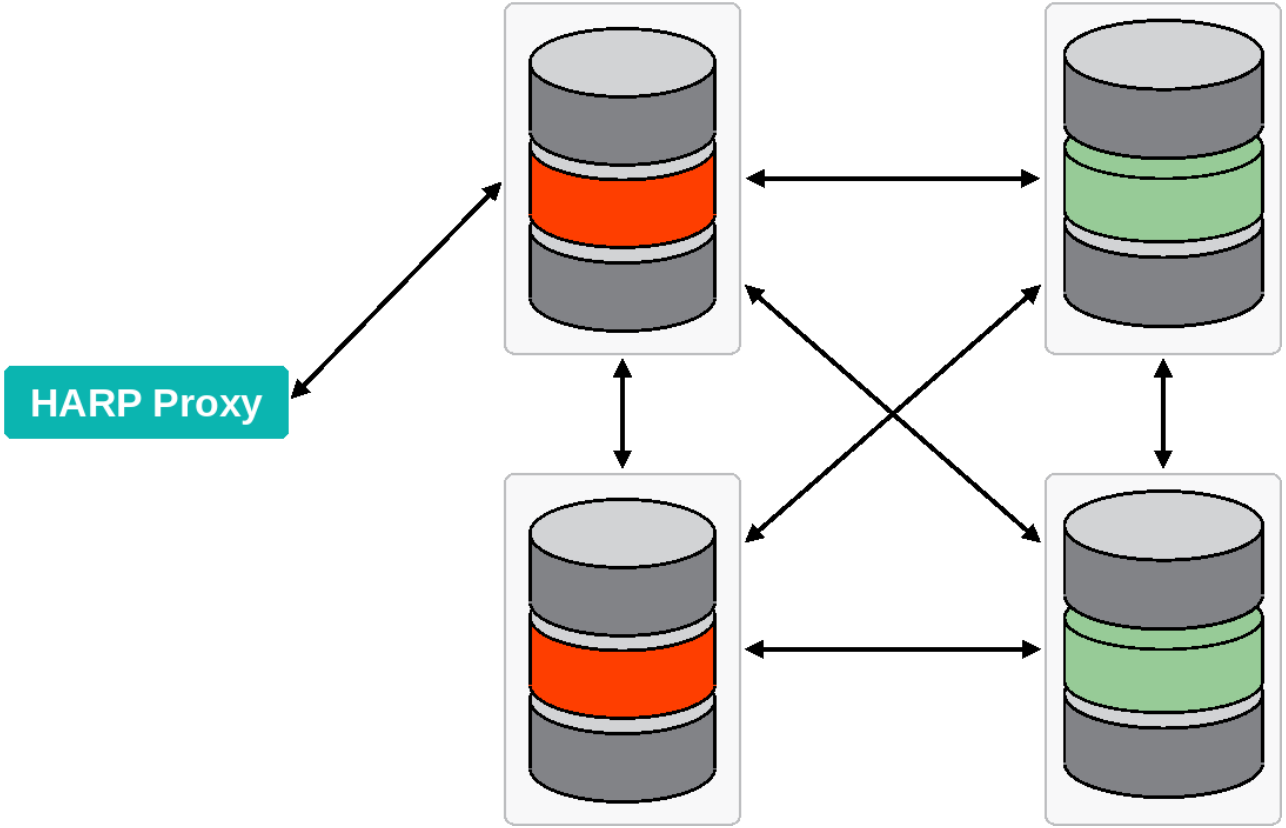
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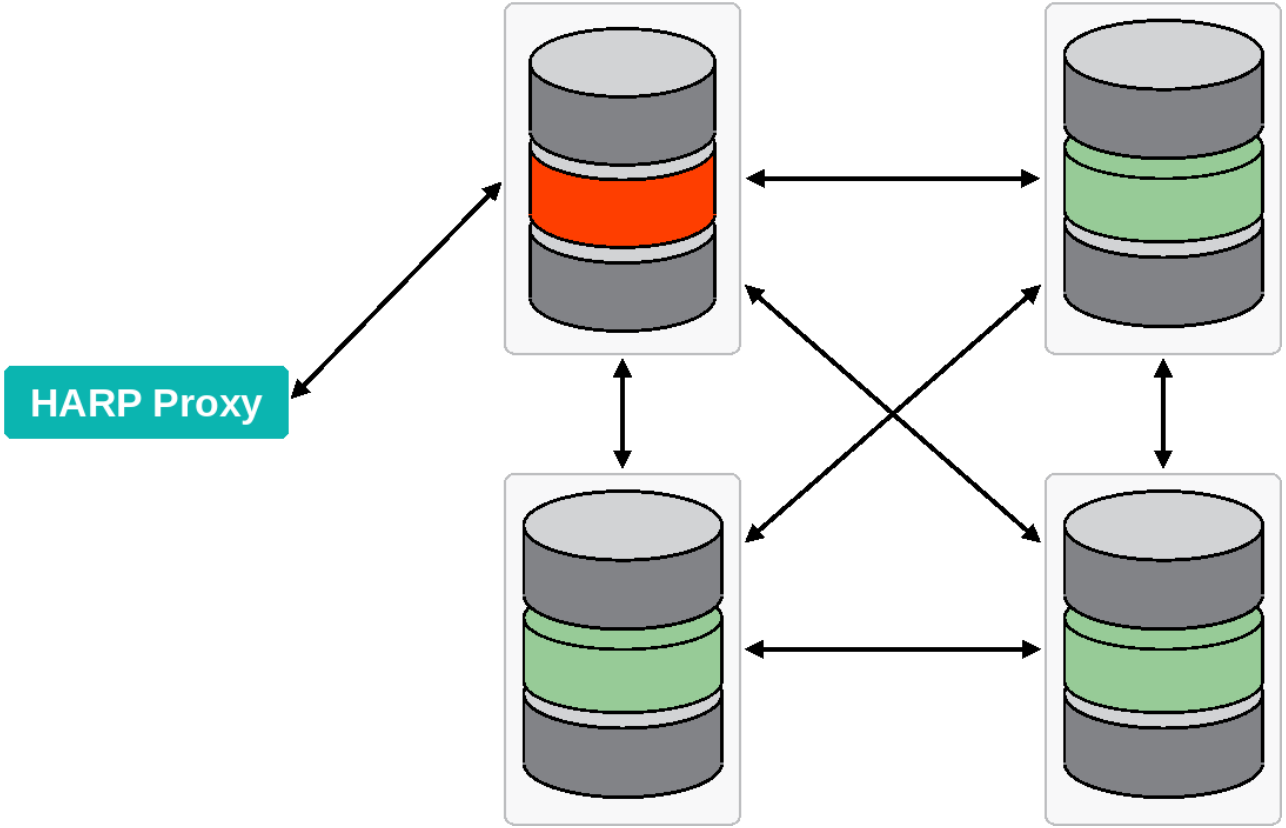
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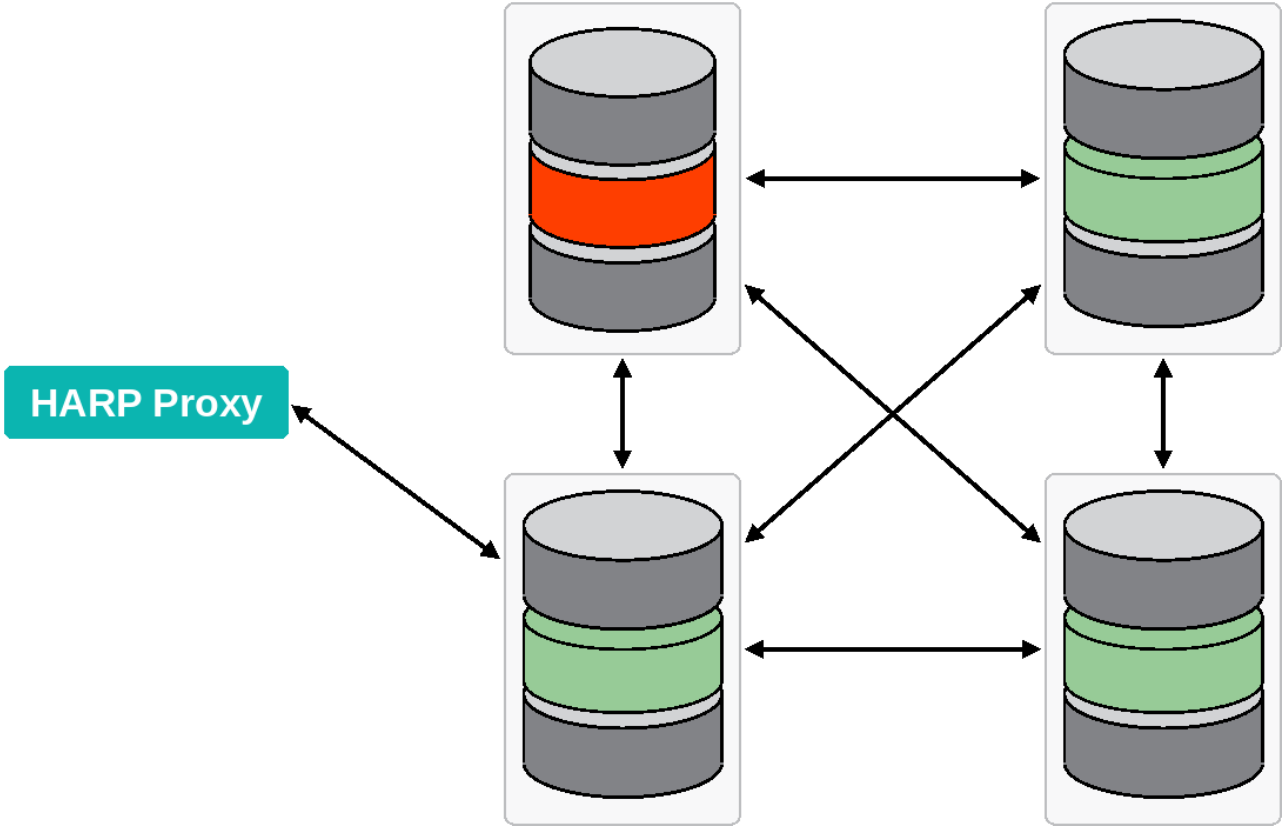
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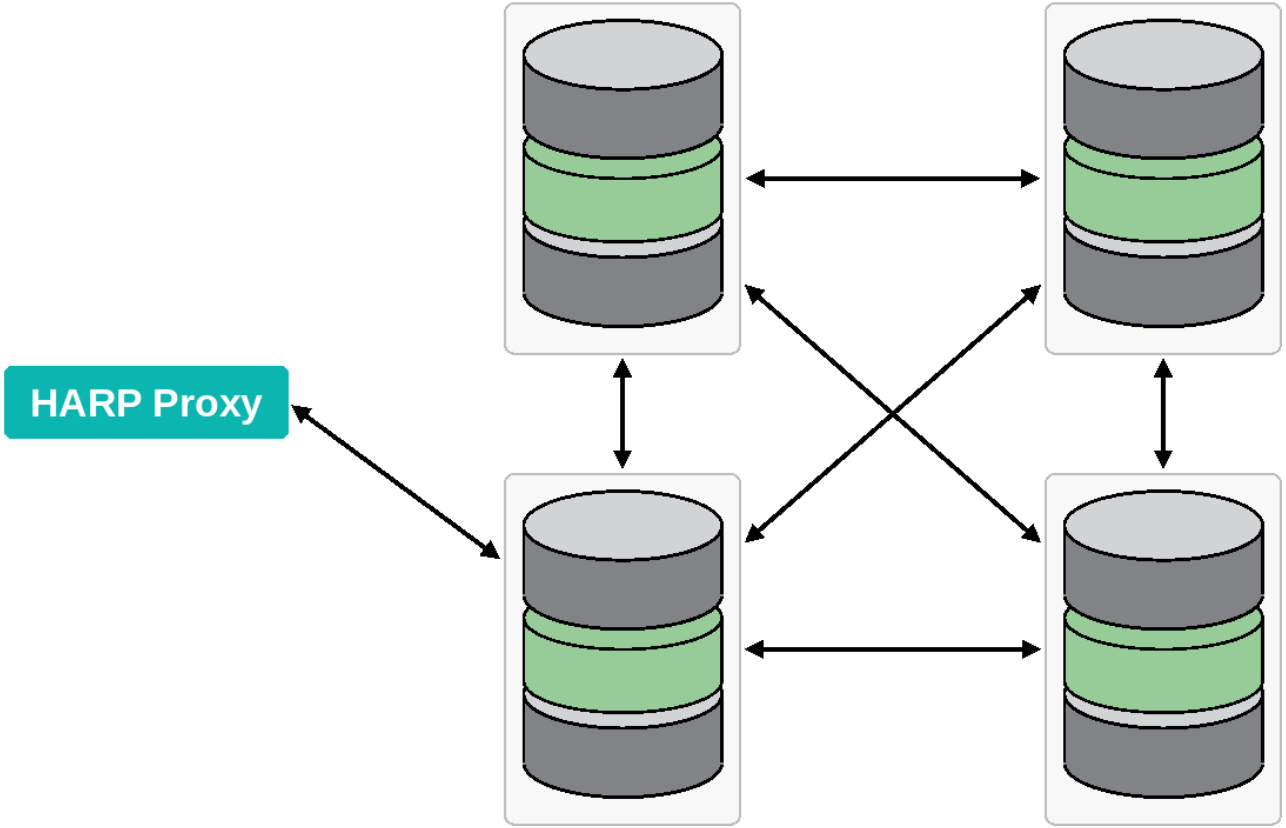
HARP Proxy

Closing Words

EDB Postgres Distributed

- Extreme High Availability
- Active-active (use carefully)
- Automatic conflict resolution
- Geo-Redundancy
- Nearly-zero downtime for maintenance
- Rolling upgrades

Dankjewel / Merci beaucoup

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