SQL Access to VistA

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Overview

YottaDB® – https://yottadb.com

- A mature, high performance, hierarchical key-value NoSQL database whose code base scales up to mission-critical applications like large real-time core-banking and electronic health records, and also scales down to run on platforms like the Raspberry Pi Zero, as well as everything in-between.

- *Rock Solid. Lightning Fast. Secure. Pick any three.*

- Octo is a SQL database engine that whose tables are stored in global variables

- <u>Octo is a YottaDB application, not a GT.M application</u>

  - Requires ydb* environment variables

  - Runs on SI replication instance from GT.M or YottaDB

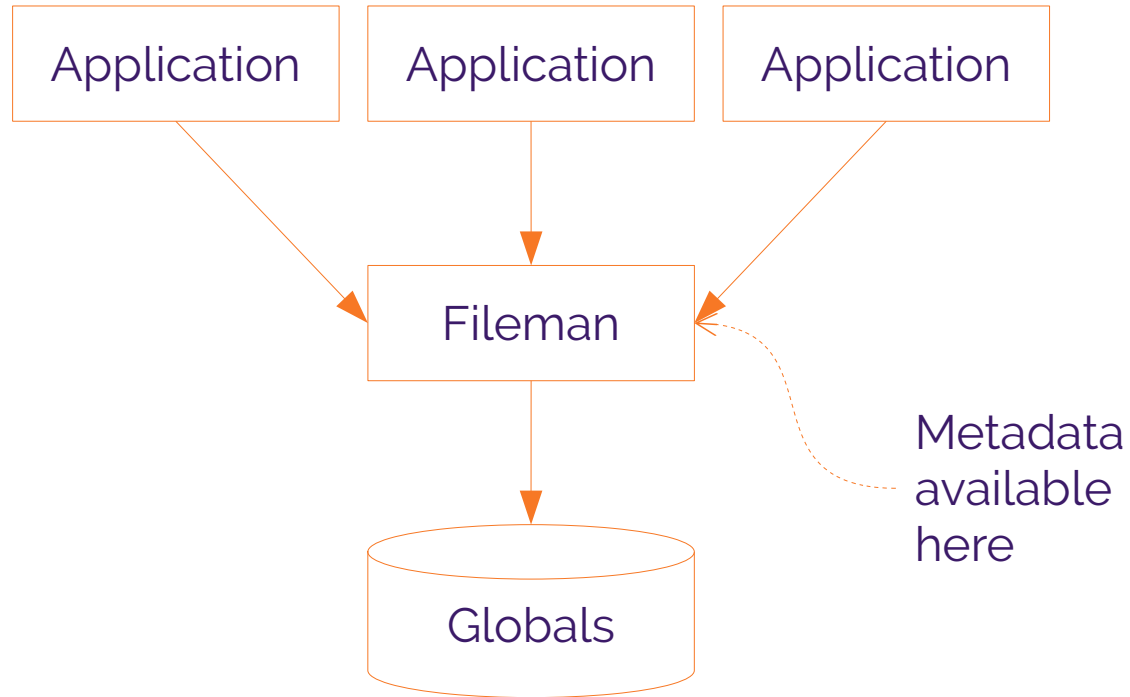Octo is a registered trademark of YottaDB LLC

Demo Part 1 of 2

SQL Access? Why?

- VistA is a great healthcare information system

- Fileman has capable and efficient reporting tools
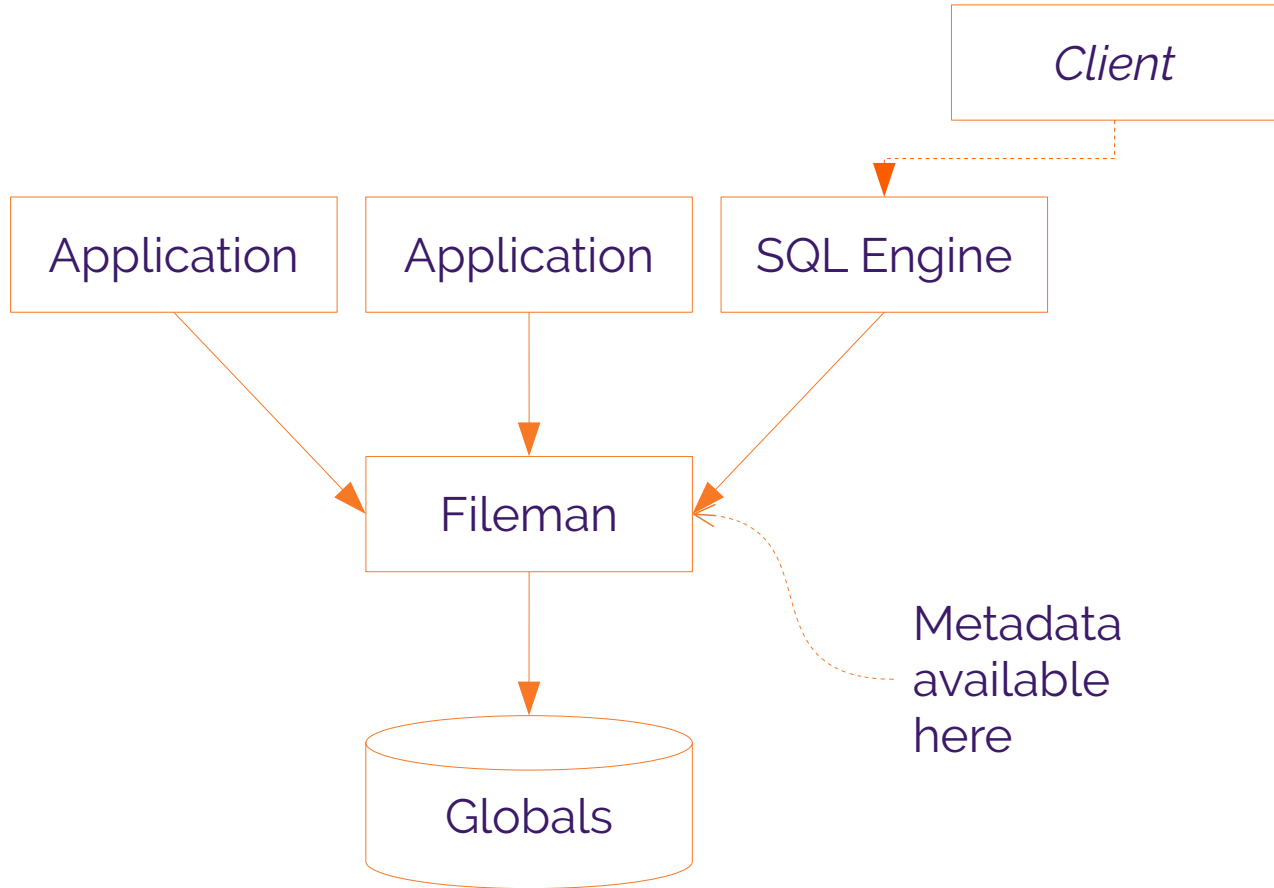
- But...

SQL Access? Why?

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- But...

  – Knowledge of Fileman and roll/scroll interface

  – Business analysts know SQL and expect GUIs
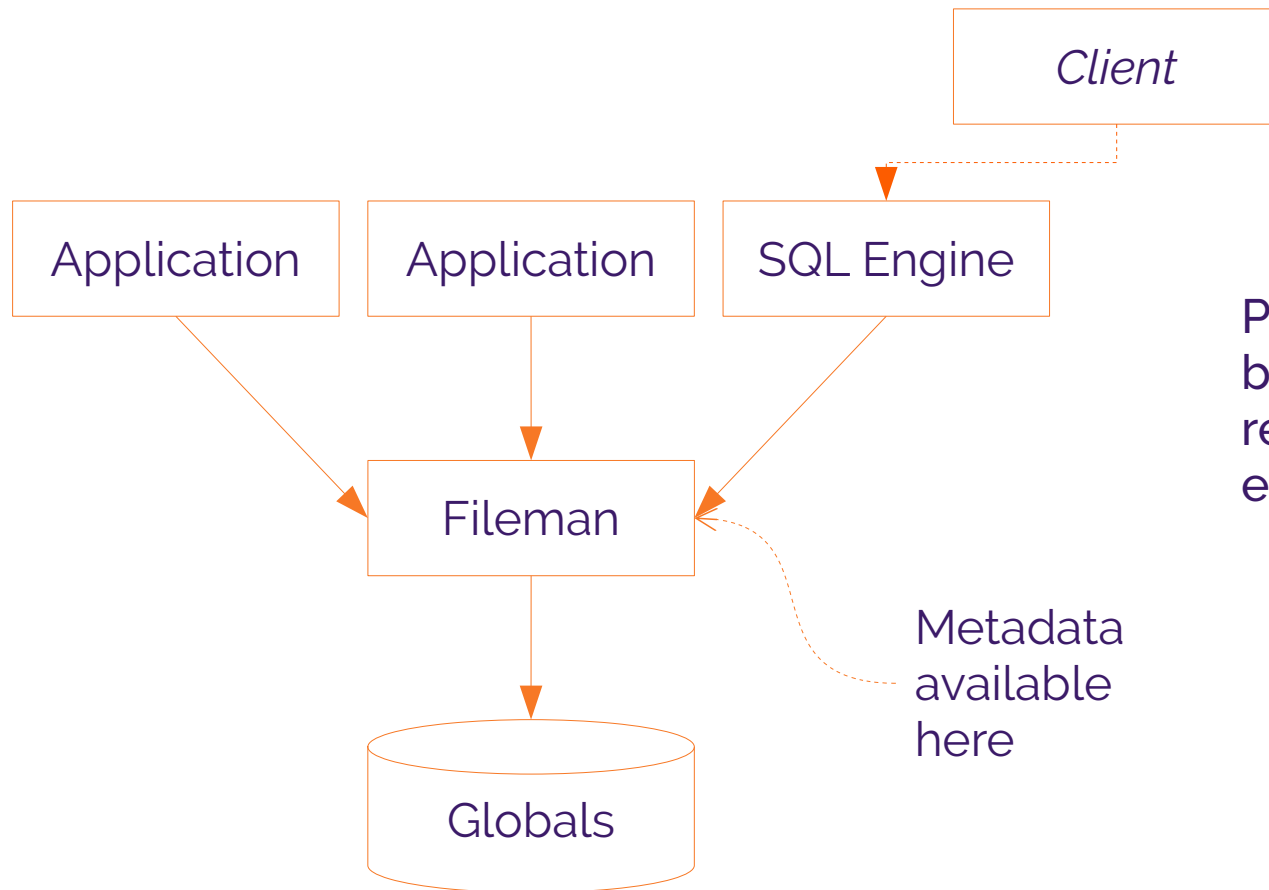
  – Wealth of existing tools, many FOSS – e.g., see https://opensource.com/business/16/6/top-business-intelligence-reporting-tools

VistA Layers (Simplified)

Yotta**DB**

Application   Application   Application

Fileman

Metadata
available
here

Globals

SQL Access (Conceptual)

Client

Application   Application   SQL Engine

Fileman

Metadata available here

Globals

SQL Access (Limitation)

YottaDB

Client

Application   Application   SQL Engine

Fileman

Globals

Metadata
available
here

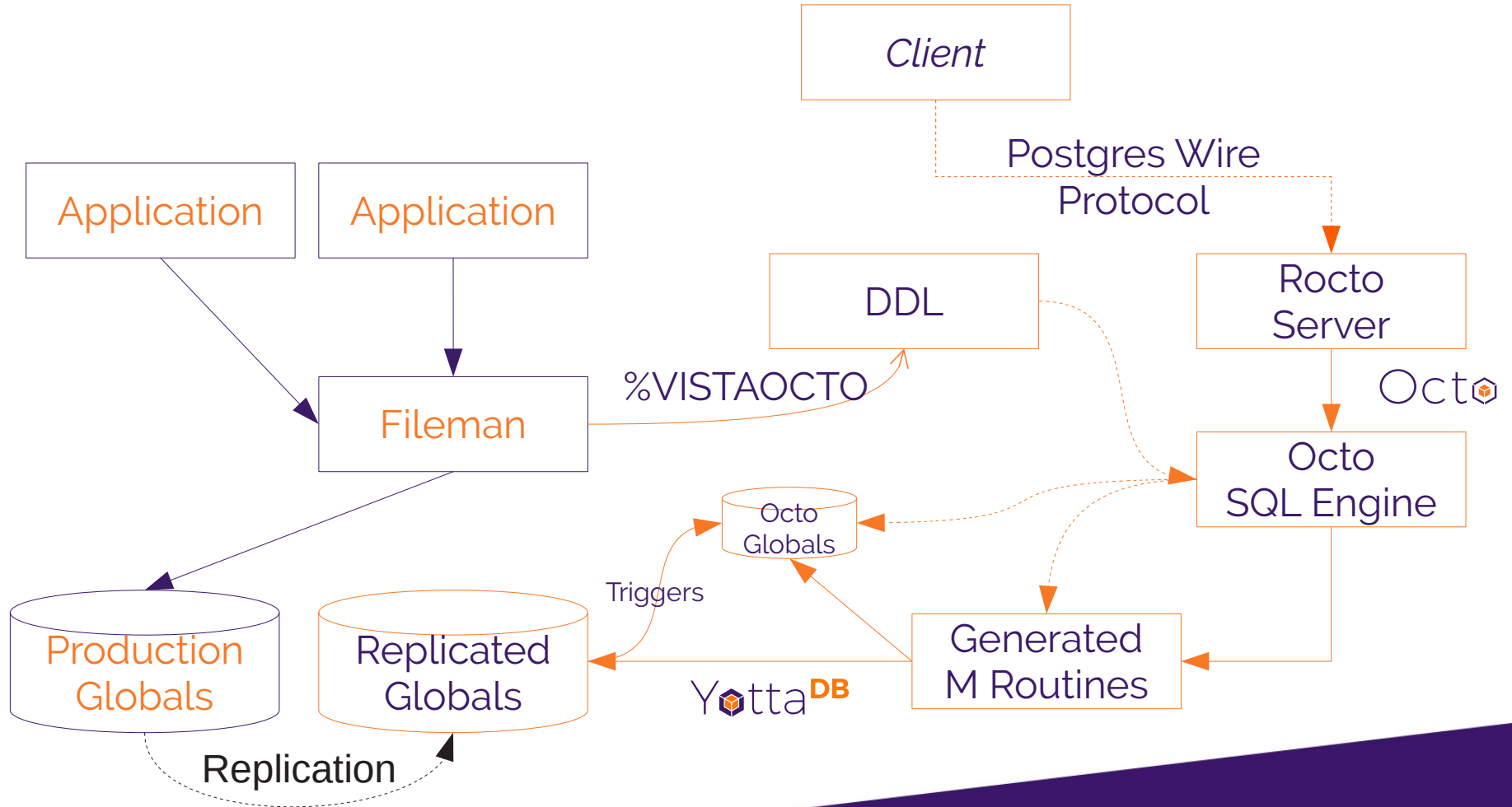Performance
bottleneck from
reading metadata for
every query!

Octo Architecture
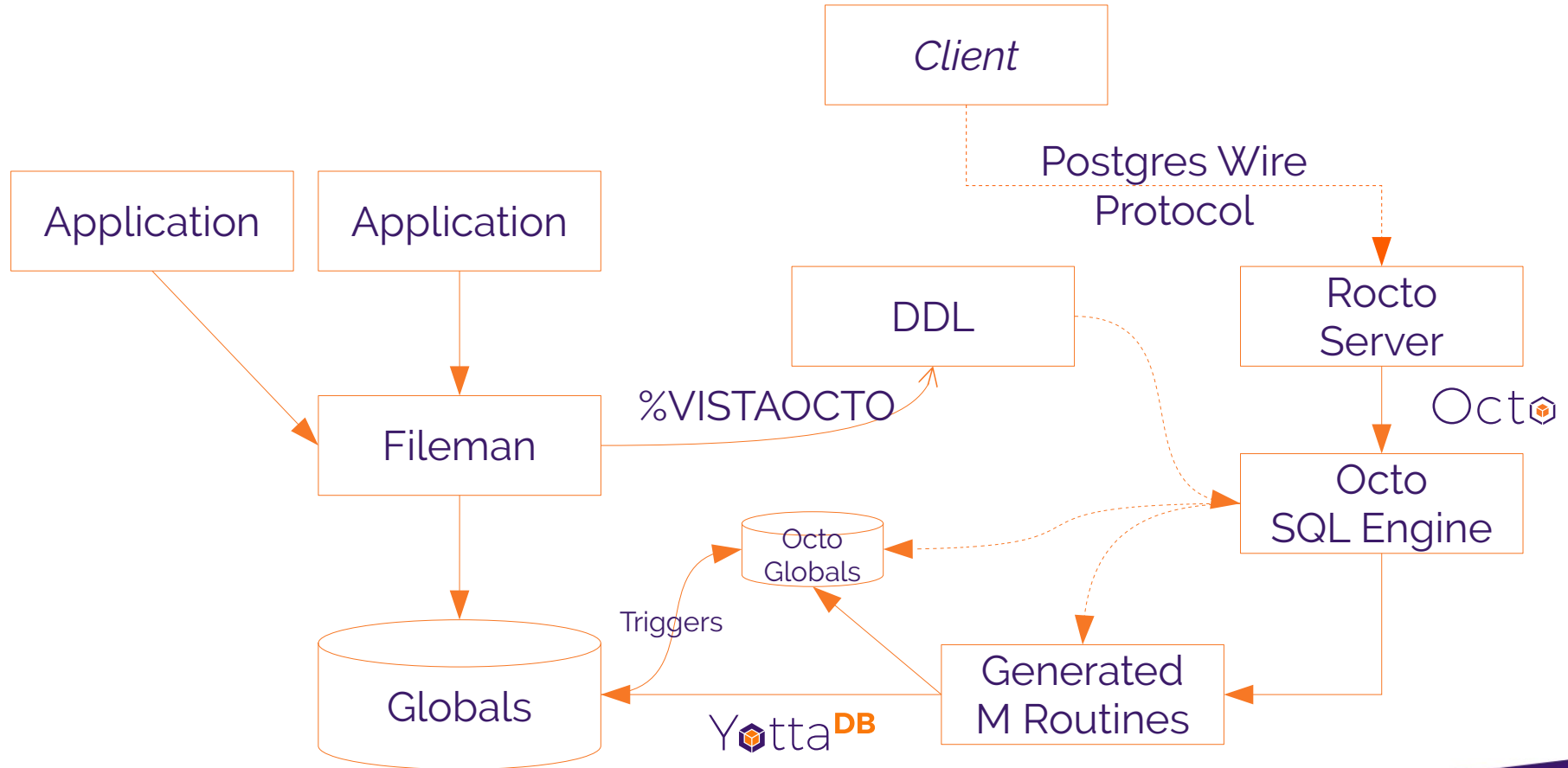
Octo Production Configuration

Demo Part 2 of 2

Octo Status & Road Map

- https://gitlab.com/YottaDB/DBMS/YDBOcto

- Initial production release Any Day Now™
  - VistA Fileman to DDL mapping tool
  - Read-only access (SQL-92 plus required extensions)
  - PostgreSQL compatible JDBC client support

- To follow: read-write access, other RDMS compatiblity

Yotta**DB**

Thank You!

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