

Octo Updates

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Overview



- A mature, high performance, hierarchical key-value , language-agnostic 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
- Octo is a YottaDB application, not a GT.M application
 - Requires functionality in YottaDB and not available in GT.M
 - Runs on SI replication instance from GT.M or YottaDB

Octo is a registered trademark of YottaDB LLC

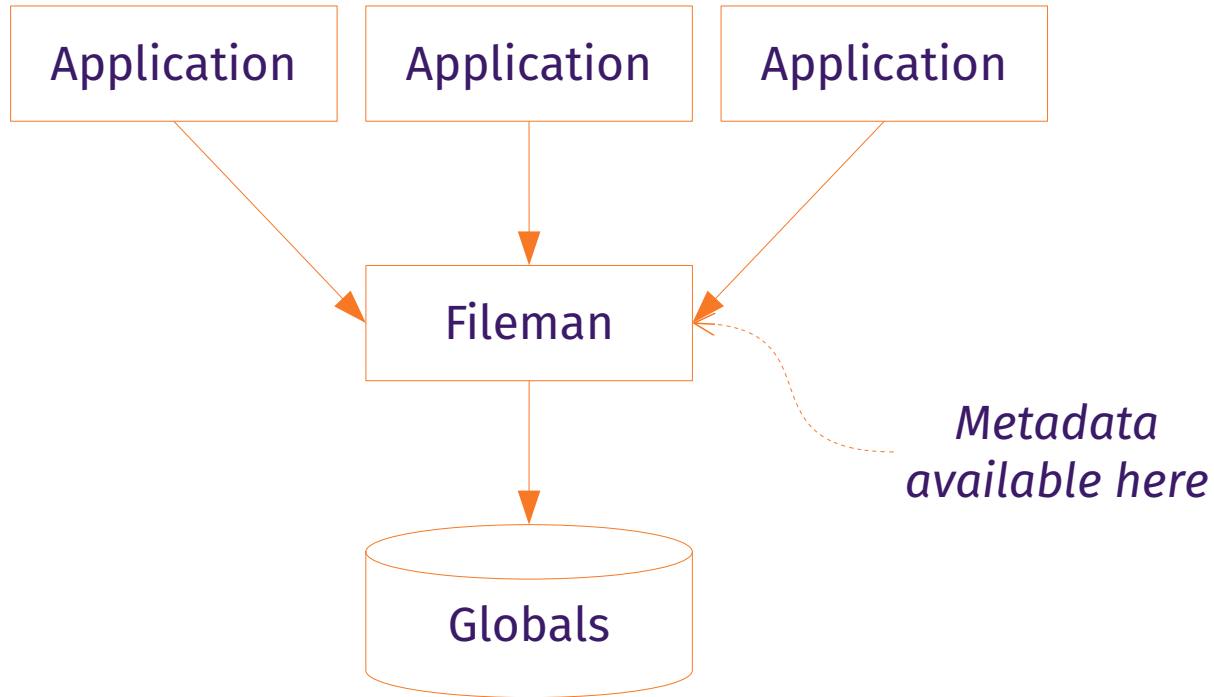
SQL Access? Why?

- VistA is a great healthcare information system
- Fileman has capable and efficient reporting tools
- But...

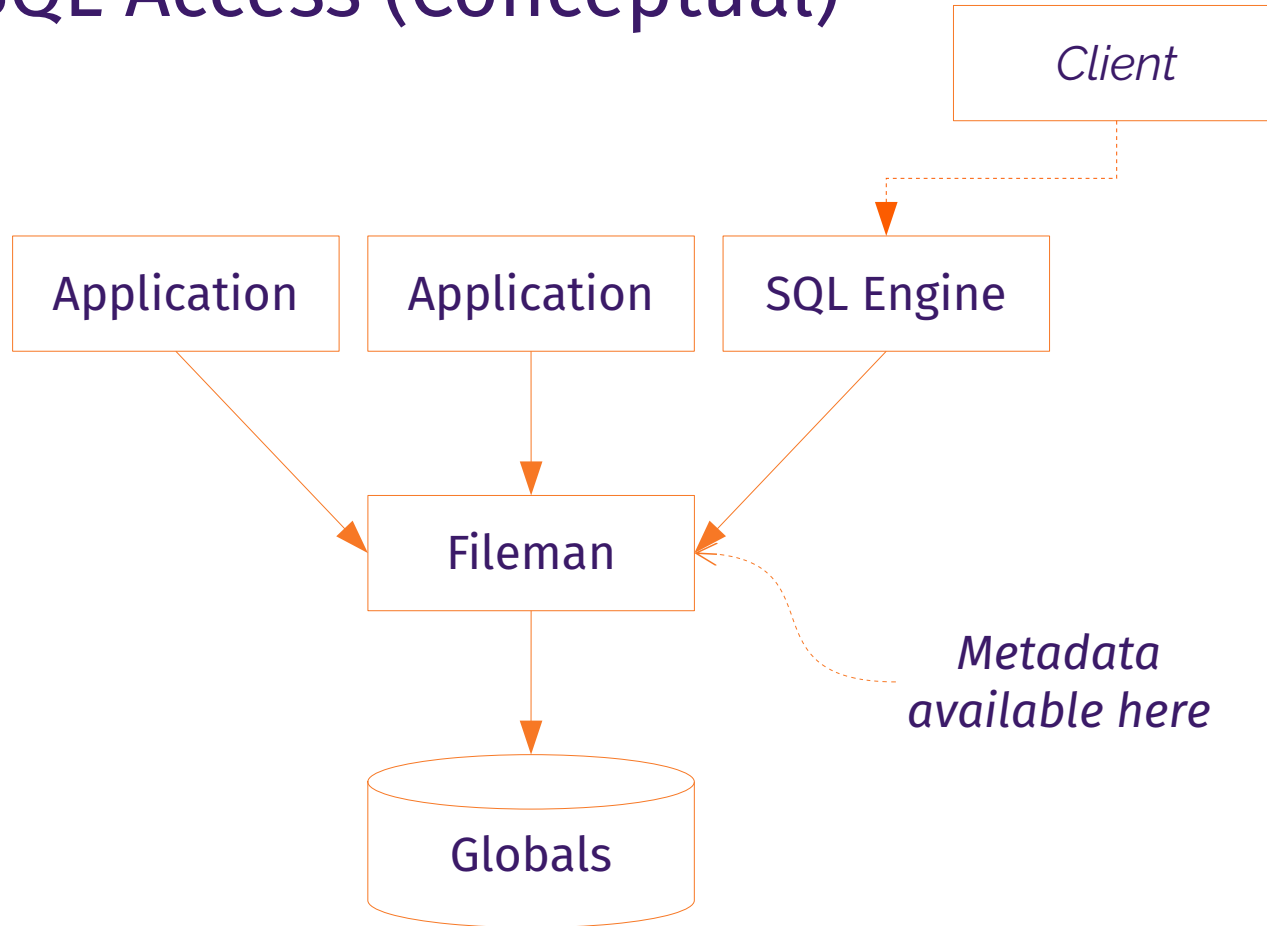
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- But...
 - Knowledge of Fileman and roll/scroll interface
 - Business analysts know SQL and expect GUIs
 - Wealth of existing tools, many FOSS – e.g., see <https://opensource.com/business/16/6/top-business-intelligence-reporting-tools>

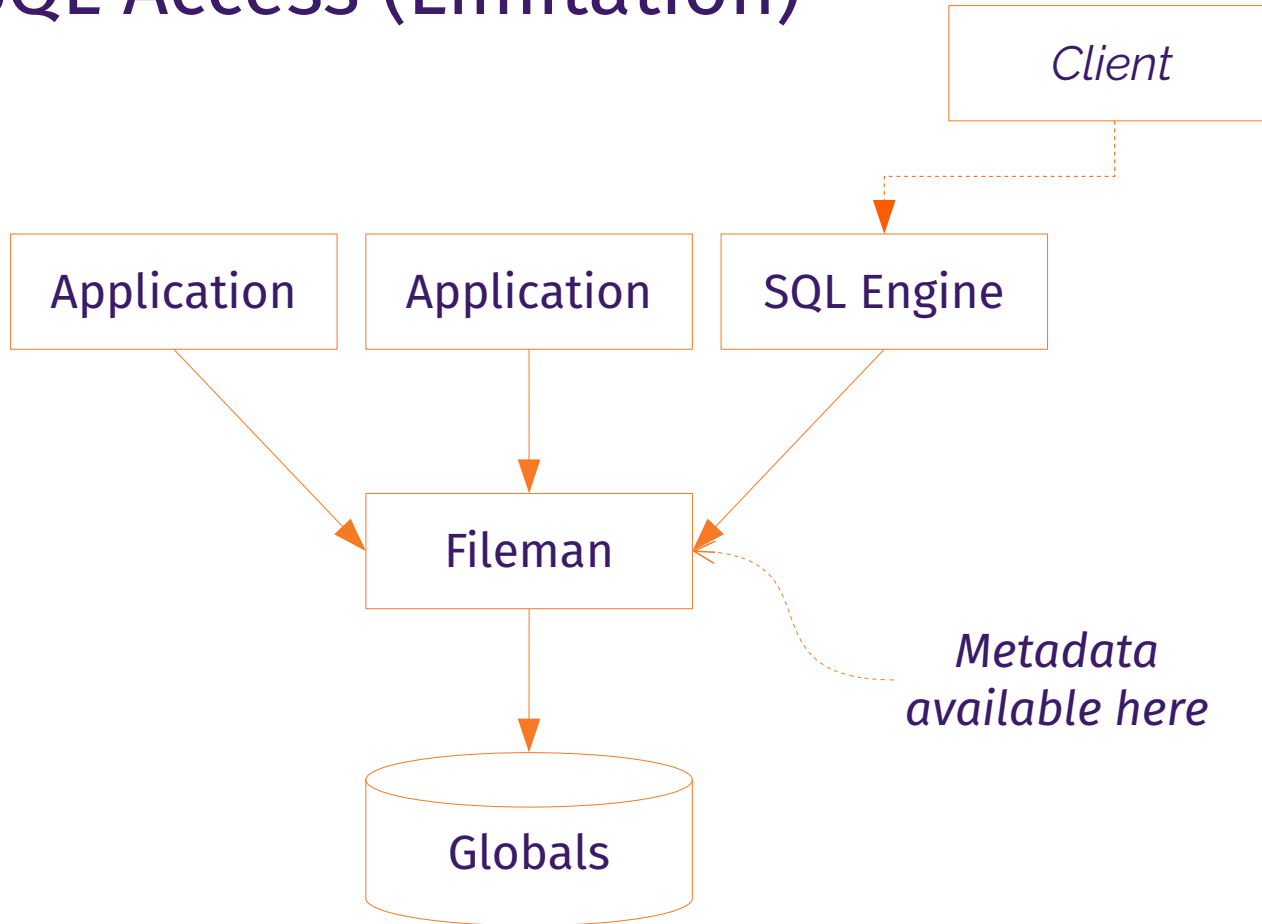
Vista Layers Simplified



SQL Access (Conceptual)

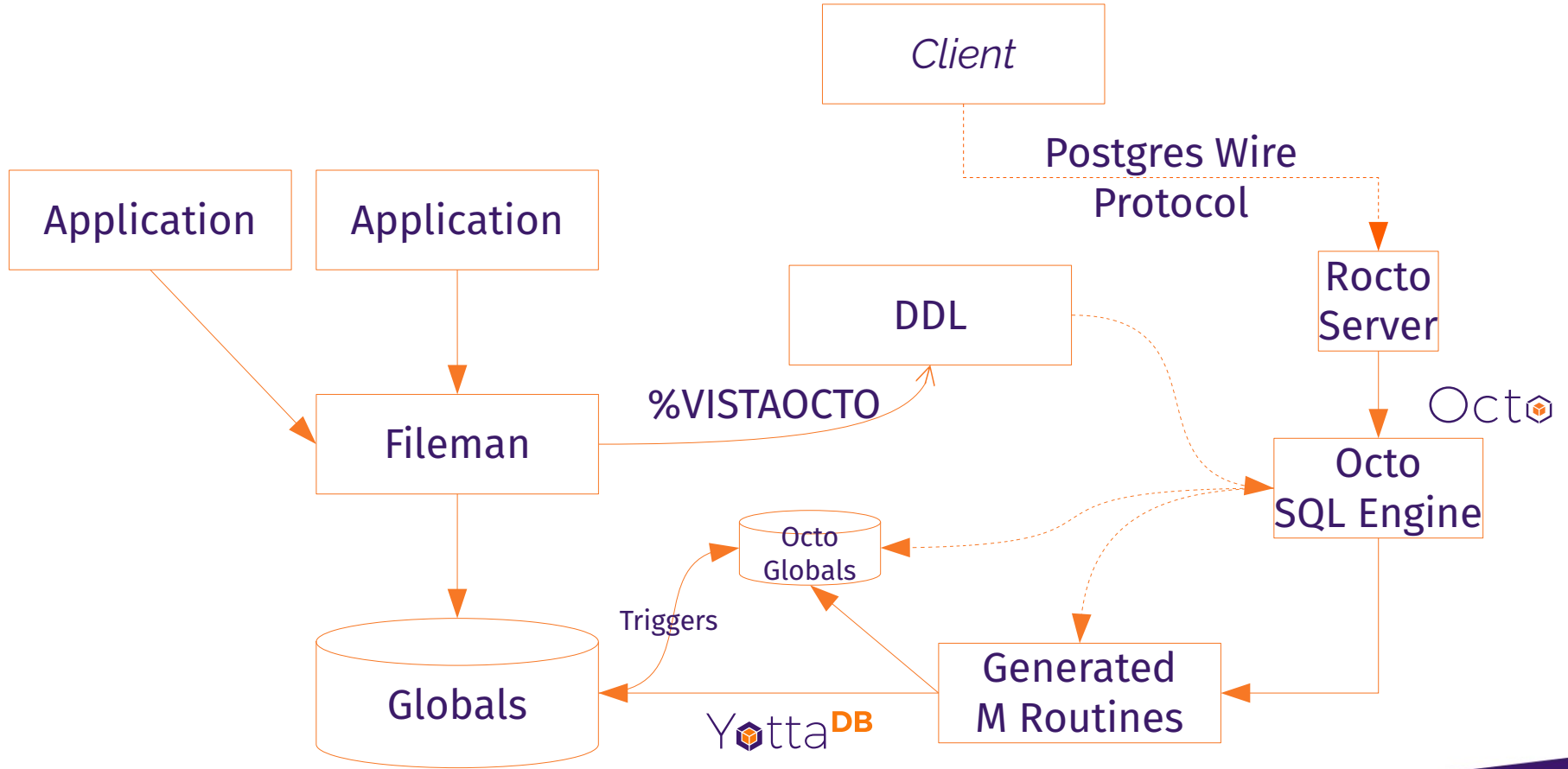


SQL Access (Limitation)

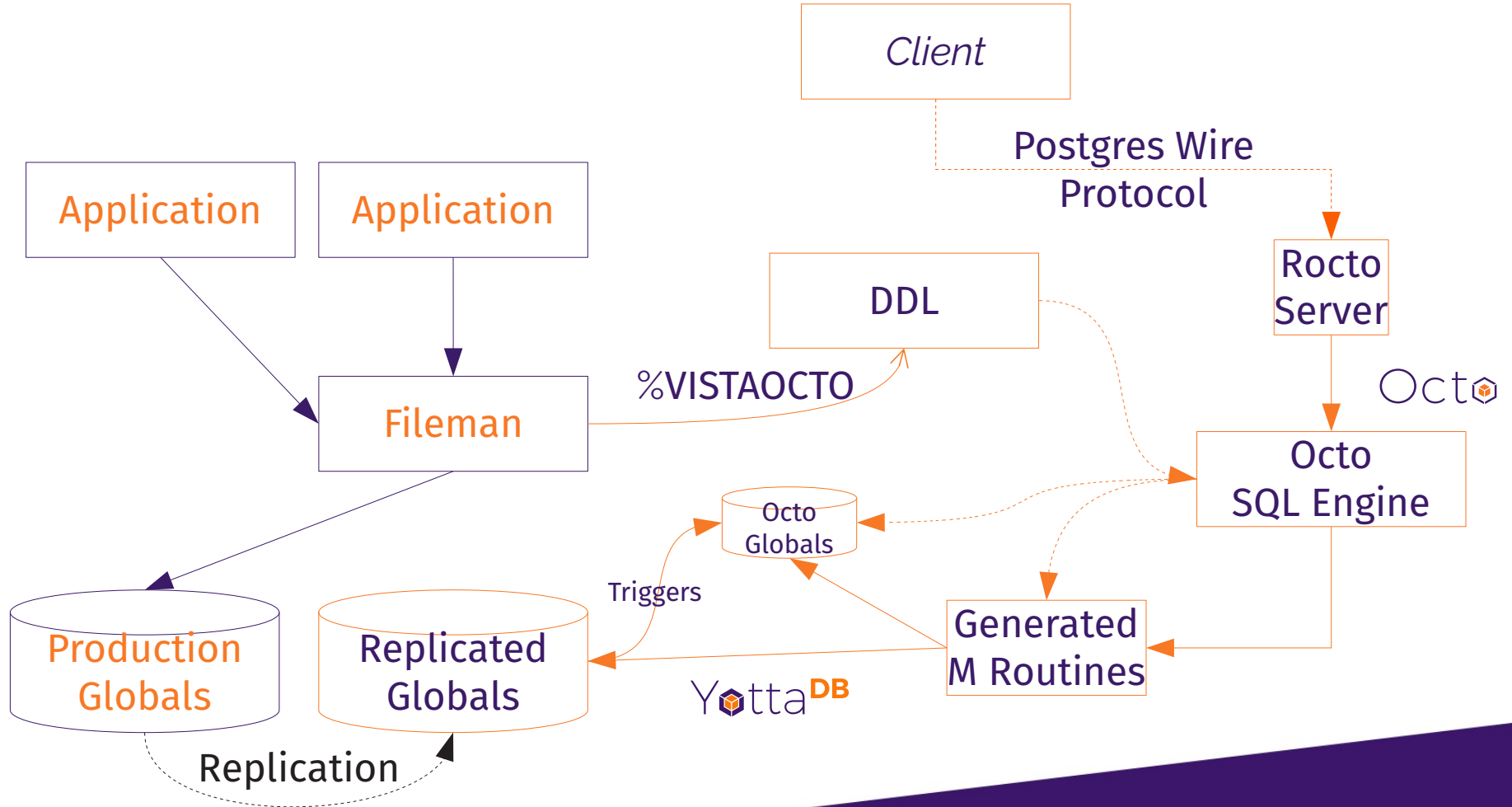


Performance bottleneck from reading metadata for every query!

Octo Architecture



Octo Production Configuration



Octo Status & Road Map

- <https://gitlab.com/YottaDB/DBMS/YDBOcto>
- Initial production release on September 2020
- Continuously released
 - Every commit gets extensive regression testing using the Continuous Integration pipelines
 - You can drop in a new version anytime

Implemented Functionality since last VCM (1/3)

- Lots of bug fixes
- Views
- Systemd Set-up Information for Rocto
- More information in `\d tablename`
- Can now use EXTRACT with non-key columns as well as use SQL functions in EXTRACT
- INFO_EXECUTION_DONE message

Implemented Functionality since last VCM (2/3)

- Support for extra clients (reporting and SQL)
 - Microsoft products (Excel, and PowerBI)
 - SQLWorkbench/J
 - DBeaver
- ARM64 Docker Images
- Write Functionality Enhancements (not applicable to VistA)

Implemented Functionality since last VCM (3/3)

- VistA DDL Generator Changes
 - Fixes to functions file

Future Plans

- ~~Power BI and Excel~~ (done)
- ~~VIEWS~~ (done)
- Date/Time support
- Foreign Key Constraints

Try for yourself (port 1338)



`https://hub.docker.com/r/yottadb/octo-vehu`

Demo





YottaDB

Thank You!

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