



Mapping the VistA Schema for SQL Access by Octo

- 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.*

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What is Octo? – High Level



- Octo is a YottaDB plugin that provides access to your YottaDB Key-Value pairs in a relational data format to use with traditional SQL based tools.
- It is designed as a plug-in replacement for PostgreSQL
 - Uses the PostgreSQL wire protocol
 - Uses the PostgreSQL ODBC/JDBC/OLE DB driver
- The way the data shows up is up to you

What is Octo? - With VistA



- Uses the SQLI FileMan interface to drive the mapping of VistA data to Octo
- Most FileMan structures are mapped to SQL
 - Exceptions: Computed Multiples and Non-FileMan compatible data.
- Open Source software – everyone can contribute and submit issues
 - Commercial support available as add-on to YottaDB support

Demo



Demo points

- Show off NEW PERSON file
- Show off Outpatient pharmacy
- Simple joins to get users and class

Octo System Requirements



- YottaDB r1.26
- Octo Beta
- Plenty of disk space for logs, DDL, temporary tables, cross references and other storage needs
- Open TCP port for Rocto access

Octo Mapping Process - General

- Octo uses its own data structures to hold mapping data, temporary tables, cross references among other internal data needs
 - All stored in YottaDB globals
- Can be a separate global directory or mapped to a separate database file
- Any mapping tool should be designed to create SQL DDL and import into Octo

Octo Mapping Process - VistA



- FileMan provides a tool called "SQLI" or SQL Interface
- SQL provides an interface that is much easier to work with than reading FileMan's Data Dictionary directly (though there is still some need to read the Data Dictionary directly)
- Mapping tool is written completely in M

Current Limitations

- Octo currently provides read-only access
 - Insert/Update capability is planned for Octo – NOT for VistA
- Certain SQL features are not implemented – You should get a Not Implemented error message (either in the logs or in your SQL client)
 - Most important ones are implemented



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Thank You!

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