Open Source FileMan/VistA SQL Access

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Approaches

- BMXNet
- FM Projection (Medsphere)
- PIP

BMXNet

- Written as a ADO.Net component that is usable in any .Net project (should be cross platform via .NETCore/Mono)
- Allows read-only access to many files
- Programatic/Custom program access only (aka can't use off-the-shelf report writers/SQL Tools)

FM Projection

- A storage plugin to MySQL to allow FileMan files to appear as SQL tables
- Code base is rather old and doesn't compile on MariaDB (Modern MySQL fork)
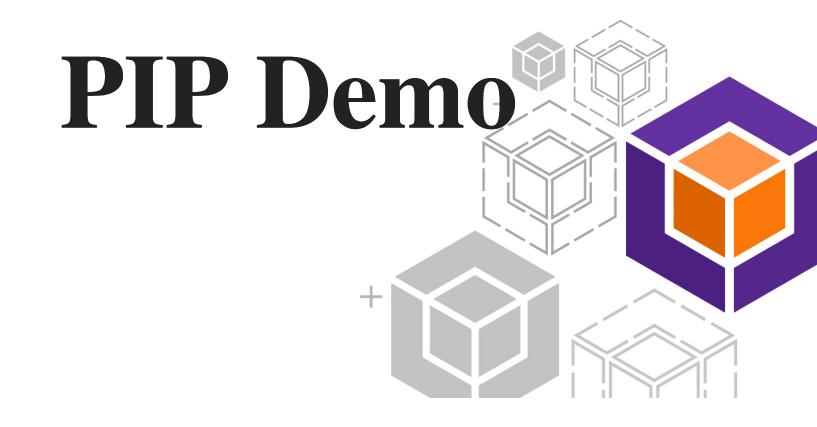- Reports of slow performance

PIP

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- Basis of Profile Banking System from Fidelity
- Released in 2008 with beta packaging, but essentially the core of the system
- Battle tested SQL support due to Profile Banking System functionality
- Also includes Profile Scripting Language (PSL) as an Object Oriented M(UMPS) Language
- Database managment system is referred to as DATA-QWIK

Initial Plan of Action

- PIP has been the focus to get to a prototype quickly (though experimented with other approaches)
  - Completely Open Source
  - Good SQL support
  - Mostly M(UMPS) (There are C call-in and C call-out programs that are used)
  - Good data mapping tools
  - Generic framework - Think beyond VistA/FileMan

PIP Demo

Accessing DATA-QWIK

- D ^SCADRV
- /home/vehu/pip/drv
- Terminal support: (XTERM with PuTTY)
    - F11 - escape
    - Shift+F6 - menu
    - End - drop-down table

Mapping Data

- File Definition
- Create File Definition
  - Global Name
  - Primary Keys (Subscripts)
  - Delimiter ($C(94))
  - Record Type 10

Where to get it?

- Source code is Open Source and available on GitHub: https://github.com/YottaDB/PIP
- Docker container for ease of development/getting started
- VistA-PIP integrated container available on DockerHub: https://hub.docker.com/r/cje1985/vehu-pip/

One more thing

Automated VistA mapping tool

- Manually mapping is slow, prone to errors
- Automated mapping is fast and can be error checked
- Automated tests written
- No support for SubFiles/Word-Processing fields
  - Yet!
- Source code is Open Source and available on GitHub

Questions/Comments

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