SQLQueries Installation

Need

A customer of mine uses a systems guy who prefers that no one use database tools on any server, test or production. This put a severe limitation on all of the users in that we were limited to using dbExplor for any work with the data. To get around this limitation, SQLQueries was born and the customer has kindly provided permission to pass this along to the DataFlex community.

What does it do? Only queries. You cannot do inserts, updates, deletes or alter the database itself in any way.

The original version was written strictly for the Postgres database that is used by the customer. That original version has now been expanded to work with several different databases, MSSQL, MySQL and the original Postgres. Others will be added as the need arises.

Limitations

Concatenated queries – two queries separated by a semicolon ";" – are not permitted for prevention of SQL Injection. This too may be expanded upon at some point.

Temporary tables are not currently supported but hopefully will be in future.

Design

There are three tables that accompany SQLQueries to support its functionality

- Sysconfig - Configuration system table
- Users - User table
- SavedQueries – so that popular queries can be saved for future use

Since it isn't known what database will be used by the users of this tool, the above tables were created in the embedded database. In addition, the user table at a work site might be a better fit than this one. It is expected that some users will convert these tables to their own SQL database. If so, create SavedQueries with an ID used in index 1 and few internal changes to SQLQueries will be required.

Drivers

In general there are two drivers for SQL in DataFlex, the DAW drivers and Mertech. Postgres and MySQL have both been tested using the Mertech driver and setup is identical for them. Of course there's also ODBC and that's a DAW driver but is out of scope for now.

The DAW driver was used for the SQL Server connection and all that is required is a connection string. MSSQL is the default installation for SQLQueries.

To keep things separate and as simple as possible, a specific .pkg file has been defined for each database driver.

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SQL Server Setup

A connection string column is provided in Sysconfig for the SQL Server connection,

SERVER=MyServer;Trusted_Connection=yes;DATABASE=FTdb

A typical connection string can be used, the above is a simple example.

Mertech Setup

Setup for Mertech is different than for SQL Server but is the same for both MySQL and Postgres. The Mertech driver requires Mertech.inc to be compiled into the application. Mertech.inc is not included with this application because it varies depending on the version of the driver and the one included with your version of the driver is the one that should be used. Copy your Mertech.inc into the Appsrc folder of this workspace before beginning.

If installing SQLQueries for use with the Mertech driver you will need to enter the database login information, recompile, and finish up by entering login information for SQLQueries. The setup dialog will create a file called LoginMertech.pkg which has the following code:

```
Login "localhost" "UserName" "PW" " MDSMYSQL"

Set_DataBase_Name to "Testdb"
SQL_Use_DataBase     "Testdb"
```

The setup dialog will walk you through this simple process.