Query Database single and multi-database resource file formats

Query database traditionally has supported a file format used by files called ***.dbLogin*** which provide the necessary information for a single connection to a database. With the Version 2.1 release, Query database has been expanded to allow users to specify the information for multi-database connections. The following are the file format conventions.

Specifying the resource file using the DB_LOGIN_FILE property

A user can now specify the resource file by setting the environment variable "*DB_LOGIN_FILE*". For example the following C shell command will cause query database to get its connection information from "*myLoginFile.txt*" rather than *.dbLogin* or whatever. For order of precedence, see Query Database Requirements

```
setenv DB_LOGIN_FILE myLoginFile.txt
```

Single resource file format

By long standing LASP convention, the information for a single database connection is provided in a file named ***.dbLogin*** which can be present in either the current working directory or the user's home directory. This file consists of key value pairs separated by the characters "||". For example,

user || *sorceproduction*

password || *...*

server || *sorce-db*

database || *SORCE*

A query database user could also explicitly specify a different file name by using the keyword "***dbloginfile***" in the query database call. This is still supported.

A new feature has been added for the single resource case: the key value pairs may now be separated by "=" in addition to "||". For example, the following is also valid

user = sorceproduction

password = ...

server = sorce-db

database = SORCE

Multi-database resource file format

File name conventions

The default name for a multi-database resource file is ***.qdbResources***. As is true for the single user file the query database default is to look for this in the user's current working directory; and then in the user's home directory.

The user can specify any legitimate file name using either the "***dbloginfile***" keyword in a query database call or by setting the environment variable "**DB_LOGIN_FILE**".

For order of precedence, see Query Database Requirements

Resource ids and some sample file contents

In order to differentiate between items in a multi-user database, each item needs to have a prefix or "resource id". This "resource id" can (and should) be used in query database calls by using the keyword "*dbResourceId*".

Any line in a multi-database resource file that begins with "#" is assumed to be a comment and blank lines are ignored. The preferred, default

separator for key value pairs is "=". However, for compatibility with previous query database releases, "||" will also be recognized. Below is a sample of what the file contents might look like:

#Defines a connection to the SORCE_L1A database.
L1A.user = sorce
L1A.password = ...
L1A.url = jdbc:sybase:Tds:sorce-db.lasp.colorado.edu:4100/SORCE_L1A

 # Defines a connection to the SORCE_L1S database.
L1S.user = sorceproduction
L1S.password = ...
L1S.url = jdbc:sybase:Tds:sorce-db.lasp.colorado.edu:4100/SORCE_L1S

The resource ids for these connections are "*L1A*" and "*L1S*". Query database associates things such user, password, url, etc. by the resource id.

Resource ids are not case sensitive (but other things like passwords usually are)

The following will work correctly and be perceived as the same resource id.

```
mytest.user = myUserName
MYTEST.password = myPassword
MyTeSt.url = jdbc:sybase:Tds:lasp-db-dev.lasp.colorado.edu:4100/dbdev
```

However, passwords are almost always case sensitive regardless of database. And for Sybase, although not for Oracle, table and column names are also case sensitive.

Ensuring resource ids are consistent

Be careful to ensure that the resource ids are consistent. The block above which is inconsistent in upper and lower case in the resource ids will work because the resource ids are identical in a case insensitive comparison.

But the following will NOT work because the user and password resource ids do not match, and will fail a case insensitive comparison.

```
mytest.user = myUserName
MYTESTS.password = myPassword
MyTeSt.url = jdbc:sybase:Tds:lasp-db-dev.lasp.colorado.edu:4100/dbdev
```

Reserved keywords

Note that the same parameters that have always been available to query database users via the .dbLogin file are also recognized in the multi-user resource file. These should be considered as reserved words and should not be used as part of the resource id.

1. "*user*"
2. "*password*"
3. "*database"*
4. "*server*"
5. "*url*"
6. "*driver*"

Note that the resource ids are separated from the parameter names by a ".". The syntax is "*resourceId.parameter*". For example the user for resource id L1S is "*L1S.user*".

A sample query to the L1A data given the above would look something like

```
my_query = '...whatever...'
query_database, my_query, data, nrows, dbResourceId='L1A'
```

Beginning with version 2.2 (re Query Database Requirements) two new reserved words will be added to the above list.

1. "*sys*" will specify connection specific system properties
2. "*props*" will specify JDBC connection specific properties