# **Query Database V2.1 Users Guide**

### **General comments about Query Database Usage**

The query database (qdb) utility is an IDL procedure that enables programmers to retrieve and update data from a data source. The data source is usually a relational database and the programmer submits SQL queries and obtains data through a qdb invocation.

For example, in an IDL program the line

```
query_database, 'select * from MyTable', data, nrows
```

submits the query 'select \* from MyTable' and returns the row count in 'nrows' and results as an IDL array of structures in the 'data' argument.

Programmers must have a working knowledge of both SQL and IDL in order to use Query Database.

## New features specific to V2.1

#### Multi database connection capability (and the .qdbResources file)

A multi database connection capability has been added to query database. Previous versions of IDL utilized the .dbLogin resource file which contained the credentials for a single database login. Programmers could either use the default values in .dbLogin or could specify alternative credentials (user name, password, server, and database) through qdb parameters. The .dbLogin capability has been augmented in version 2.1 to support the specification of multiple sets of credentials used for making connections. The default name for this new file is .qdbResources.

The details about how to correctly write a multi database connection resource file are available at Query Database single and multi-database resource file formats.

In order to use this feature, programmers should now specify a database resource ID as an argument to IDL query\_database calls. This new argument is a keyword, 'dbResourceId'. The following is an example of typical usage:

```
query_database, 'select binary_30 from binary_types order by id', $
data, nrows, dbResourceId='devTest'
```

The resource ID identifies a unique set of login credentials contained in the .qdbResources file.

## Using an operating system property to specify the resource file

Version 2.1 will check for a property DB\_LOGIN\_FILE before looking for a resource file such as .dbLogin or .qdbResources in the current working directory or the user's home directory.

Linux example using C Shell

```
setenv DB_LOGIN_FILE myResource.txt
```

Linux example using Bash

```
export DB_LOGIN_FILE=myResource.txt
```