

Here's a quick reference intro to BQL BQL.SCREENDRIVER, associated programs, and the system in general. The BQL system is a data entry screen generator. The centerpiece program is BQL BQL.SCREENDRIVER (a subroutine) but about two dozen other programs are associated under it. All program names and file names are prefixed with "BQL."

Currently the parameter interface to call BQL.SCREENDRIVER looks like this:

```
CALL BQL.SCREENDRIVER(INPARAMS, OUTPARAMS)
  INPARAMS<1> = database id#   (the screen# you want to kick off)
  INPARAMS<2> = update flag    (1=update ok, 0=Inq only)
  INPARAMS<3> = record id      (item ID of record to edit)
  INPARAMS<4> = new id flag    (unused)
  INPARAMS<5> = hush flag      (1=suppress error display, 0=display
them)
  INPARAMS<6> = 1st SCR#
  INPARAMS<7> = first screen   (alternate file name)
  OUTPARAMS<1>= error code     (null if no errors)
```

The screen revolves around the database id# (In the code its variable name is DBNUM). Each different file being edited gets a different number. This number is passed into BQL.SCREENDRIVER as shown above. All related data tables needed to set up and drive the screen are derived through this id. You'll need to know this number if debugging or constructing a new screen.

FILES:

The file BQL.SYSTEM is small but is the centerpiece. Its id is simply DBNUM. An item from this file has two main pieces of information: 1) the name of the file to be edited, and 2) a list containing one or more subscreens found in the BQL.SCRINFO file.

The file BQL.SCRINFO has two main pieces of information: 1) a list of single-valued fields found in the BQL.FLDINFO file, and 2) a list of the multi-valued groups of fields found in the BQL.MULTI1 file.

The file BQL.FLDINFO contains one record for each single-valued field on the screen. The expected field parameters are found here, i.e. X,Y positions, data type, field widths, etc.

The file BQL.MULTI1 contains one record for each group of multi-valued fields. The main piece of information in a record from this file is a list of the multi-valued fields in the group found in the BQL.MULTI2 file.

The file BQL.MULTI2 contains one record for each multi-valued field on the screen. It contains information very similar to that found in a single-valued record from BQL.FLDINFO.

MISC:

All fields must be given a data type (text, date, integer, flag, file id, etc). The screen driver uses this to validate user entry. Input validation and internal conversion are done together in the program

BQL.ICONVERT. Output conversions are done in the program BQL.OCONVERT. Lookups are somewhat automated depending on data type.

Field numbering can have several variations. There can be gaps in numbering, sequenceing might not begin with 1, numbers may appear out of order on the layout, and fields may not have a number.

COMMON variables are found in BQL.COMMON. The COMMON dimensioned variables beginning with the characters 'SCRATCH' are reserved for programmer use and not touched by the screen driver.

External logic can be CALLED to provide various functionality such as extra intialization, field look-ups, item ID look-ups, field compatibility checks, file-time error checks.

How to set up and run a simple example screen...

For this simple example you will need to build one item in BQL.SYSTEM, another in BQL.SCRINFO, and then one item in BQL.FLDINFO for each field. Screens exist to build these items. To access these build screens: from any of the "major accounts" on R2D2 in TCL enter >BLX GO and you'll see a menu that includes among others the following choices...

1.	55	BQL.SYSTEM	BQL info for Database
2.	56	BQL.FLDINFO	BQL info for Fields
3.	57	BQL.MULTI1	BQL info for MV Windows
4.	58	BQL.MULTI2	BQL info for MV Window
Columns			
6.	60	BQL.SCRINFO	BQL info for Screens

... Select as desired to build your items. (Browsing any of the menu's other selections is ok too). Items built in the three files can be done in any order but they should all be completed correctly before run-time or else you'll just get harmless error codes when you kick it off.

Building the BQL.SYSTEM item.

To get into the BQL.SYSTEM build screen choose "1. 55 BQL.SYSTEM" from the menu displayed above. When prompted enter the id# of an existing record, or enter ".NEW" if just starting. You'll be prompted to enter a record id. Enter