

## Db2 Catalog Guide

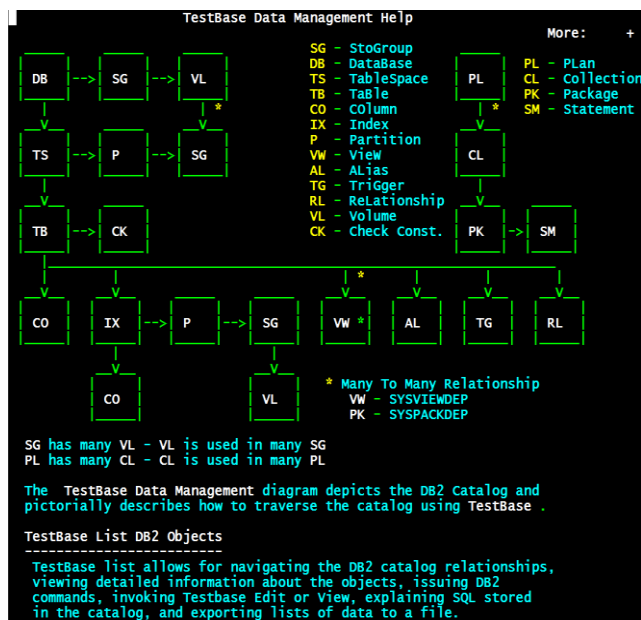
# See Important Db2 Catalog Data Without Writing SQL

## Business Challenges

As companies strive to increase revenue and improve customer service it becomes increasingly important to create or modify Db2 applications as quickly as possible. Seeing the existing Db2 objects is often the first step.

### Db2 Questions Answered by the DB2 Catalog

The meta data stored in the Db2 catalog about its objects and relationships is invaluable when considering a change to Db2 objects, trying to resolve SQL locking, or other Db2 issues. Questions like “what programs could be affected by changing a table?” We are getting lock contention on a specific table between 2 jobs identified by SoftBase’s Deadlock Advisor, “what are the determinants of lock



contention for this table and these Db2 plans?” I’m loading test data, “what other tables need to be loaded before I can load the table I need data in?” Writing SQL to traverse the Db2 catalog requires knowledge of the catalog and the relationships between the various catalog tables. Without this knowledge, a great deal of time can be spent building and modifying SQL until the correct results are obtained. Learning the Db2 Catalog is not an easy task. The following is a diagram of the Db2 Catalog used by Db2 Catalog Guide. SoftBase’s Db2 Catalog Guide makes answering questions about the Db2 environment easy without user written SQL.

- Improve Developer Productivity with Faster information
- See Db2 Object information and relationships to other Db2 objects without writing SQL to access the Db2 Catalog
- Reduce development and problem resolution time

### Modeled after the IBM ISPF Dataset List Utility

Db2 Catalog Guide is modeled after the IBM dataset list utility of ISPF -option 3.4. It allows application developers to see object Relationships and definitions using a familiar environment.

```

TestBase DB2 Catalog Guide
Option ==>
DB2 Subsystem ==> DBCG
DB2 Location: DBCGLOC

Commands:
S - Select          L - List          DI - Display
X - Expand         V - View          ST - Start
/ - List Commands  E - Edit          SP - Stop
                  EX - Explain SQL

Object
Cmd  Type  Name (Use wildcard * with L - List command)
--  --
/    TB    TDGF610.TABL

Object Types:
SG - Storage Group  CK - Check Constraint  RL - Relationship
DB - Database       IX - Index             PL - Plan
TS - Table Space    VW - View              CL - Collection
P - Partition       CO - Column            PK - Package
VL - Volume         AL - Alias             SM - Statement
TB - Table          TG - Trigger
    
```

\*\* Note - Object types may be used as a cmd as in this example: use a TS cmd on a database to see all tablespaces in the database - TS DB DSNDB06

Db2 Catalog Guide provides a drill down capability to show the relationships between Db2 objects as well as a selection capability to see object details.

The “/” can be used to view a list of commands which are available for use on a specific object or jump directly to a related object.

```

Option ==>
Command Actions

Commands:
Object Type: TB
Object Name: TDGF610.TABL

Command:
SG SG Storage Group SM Statement PL Plan
DB Database L List CL Collection
TS TableSpace X Expand PK Package
P Partition S Select EX Explain SQL
TB Table V View CK Check Const
IX Index E Edit
VW View DI Display
CO Column ST Start
AL Alias SP Stop
TG Trigger VL Volume
RL Relationship SQ View SQL

Select a Hi-lited choice and press ENTER to process command.

** Note -
on a da
    
```

If Testbase Db2 Edit is installed, tables listed can be viewed or edited from here.

## No Db2 Catalog Contention

No locks are taken on the Db2 Catalog. All catalog SQL is static SQL WITH UR isolation level. This makes it safe for all developers and other less experienced users.

The S command shows the data in the Db2 catalog about the object:

```
testbase Db2 Table          Lines 1 OF 62
Command ==>                Scroll ==> PAGE
                             DB2 Subsystem ==> DBCG

DB2 Location: DBCGLOC
DB2 Object  : TDGF610.TABL

Commands: Find  Export  Explode

NAME . . . . . TABL
CREATOR . . . . . TDGF610
TYPE . . . . . T
DBNAME . . . . . TDGF6100
TSNAME . . . . . TDGF10
DBID . . . . . +00271
OBID . . . . . +00003
COLCOUNT . . . . . +00022
EDPROC . . . . .
VALPROC . . . . .
CLUSTERTYPE . . . . .
CLUSTERRID . . . . . +0000000000
CARD . . . . . -0000000001
NPAGES . . . . . +0000000002
PCTPAGES . . . . . -00001
IBMREQD . . . . . I
REMARKS . . . . . DGFTTABL
PARENTS . . . . . +00000
CHILDREN . . . . . +00005
KEYCOLUMNS . . . . . +00002
RECLENGTH . . . . . +00886
STATUS . . . . . X
KEYOBD . . . . . +00004
LABEL . . . . .
CHECKFLAG . . . . .
CHECKRID . . . . .
AUDITING . . . . .
CREATEDBY . . . . . CS8J
LOCATION . . . . .
TBCREATOR . . . . .
TBNAME . . . . .
CREATEDTS . . . . . 2016-04-22-16.42.25.130974
ALTEREDTS . . . . . 2016-04-22-16.42.25.130974
DATACAPTURE . . . . .
RBA1 . . . . . .ic
```

Data like RBA1 can be exploded to see the hex representation. Most data on panels can be exported to a physical sequential file and Find is supported on most panels to find and display the next occurrence of a character string.

