

Db2 Catalog Guide

See Important Db2 Catalog Data Without Writing SQL

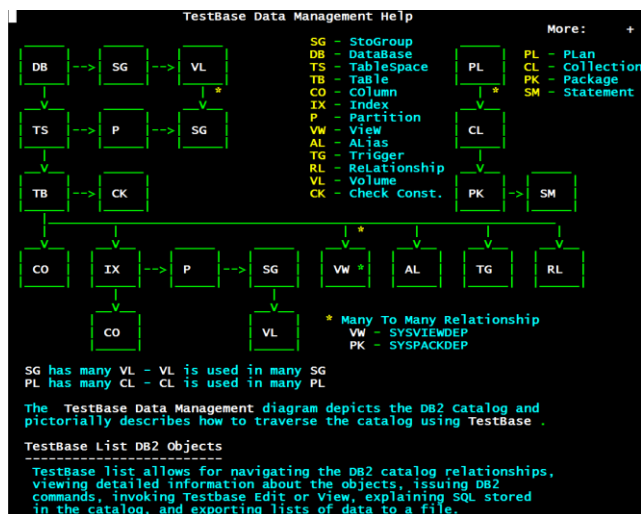
Business Challenges

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 ==>
Commands:
S - Select
X - Expand
/ - List Commands
L - List
V - View
E - Edit
EX - Explain SQL
DI - Display
ST - Start
SP - Stop
DB2 Subsystem ==> DBCG
DB2 Location: DBCGLOC

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

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

** 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 DSNDDB06
    
```

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 ==>
Commands:
S - Sele
X - Expa
/ - List
Object Type: TB
Object Name: TDGF610.TABL

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

Object Type
SG - Sto
DB - Dat
TS - Tab
P - Par
TB - Tab

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 Location: DBCGLOC       DB2 Subsystem ==> DBCG
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
KEYOBID . . . . . +00004
LABEL . . . . .
CHECKFLAG . . . . .
CHECKRID . . . . .
AUDITING . . . . .
CREATEDBY . . . . . CSB3
LOCATION . . . . .
TBCREATOR . . . . .
TBNAME . . . . .
CREATEDTS . . . . . 2016-04-22-16.42.25.130974
ALTEREDTS . . . . . 2016-04-22-16.42.25.130974
DATACAPTURE . . . . .
RBA1 . . . . . 1c
```

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.

