

From Copybooks to SQL Modernizing IMS Metadata with the IMS Catalog

Gary Turner
Sr Sales Engineer
BMC Software

Agenda

- Adding copybook information
- DECODE examples
- Demo
- SPUFI and SQL Generator
- Demo

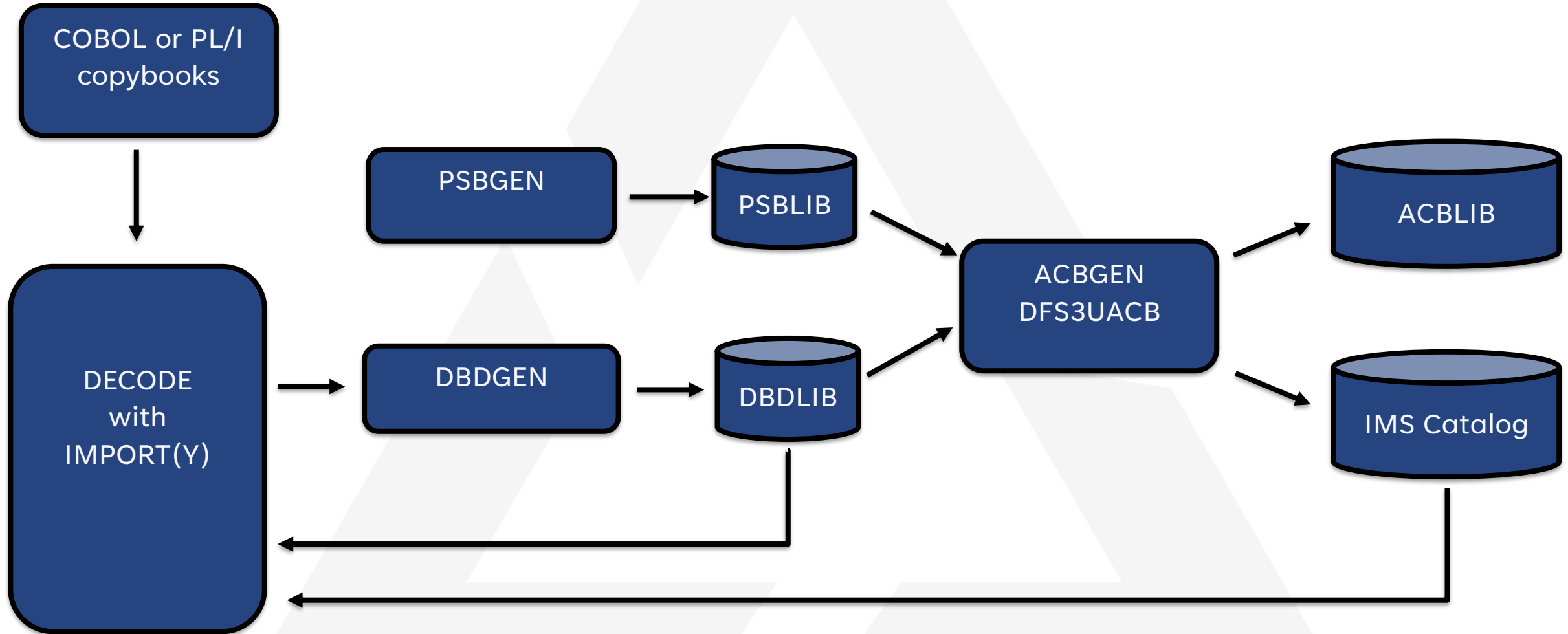
Vendor Options

- **IMS Explorer for Development (E4D)**
- **BMC AMI Change Manager for IMS**
- **IMS Administration Tool for z/OS**



https://mediacenter.ibm.com/media/t/1_f1cvlzu0

Populating IMS Catalog with metadata



Batch DECODE command

- **DBD**
 - Database object to disassemble. Can use wildcard *
- **SOURCE**
 - IMS DBDLIB
 - Catalog
 - ACBLIB
 - Directory (Active or Staging)
- **IMPORT**
 - Generate FIELD statements in the DBD source
- **ONEXIST**
 - FIELD name already exists, IGNORE or UPDATE
- **RELATED**
 - Include any logically related databases
- **DDL**
 - Generate DDL or GEN syntax (or both)

Decoding and Adding Copybook information

```
//DECODE EXEC PGM=DLIGENTR,REGION=0M,PARM='ULU,DBI'  
//STEPLIB DD DISP=SHR,DSN=BMCDBU.V51QA.SMPE.DBULIB  
// DD DISP=SHR,DSN=BMCDBU.V51QA.SMPE.CPCLIB  
// DD DISP=SHR,DSN=MVSGLT1.GT15.SDFSRESL  
// DD DISP=SHR,DSN=DBU.QA.ALL.PASSWORD  
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.SXVJLOAD  
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.CXVJLOAD  
//SRCLIB DD DISP=SHR,DSN=MVSGLT1.XRF.IMPORT  
//IMS DD DISP=SHR,DSN=MVSGLT1.GT15.DBDLIB  
// DD DISP=SHR,DSN=MVSGLT1.XRF.DBDLIB  
//DFSRESLB DD DISP=SHR,DSN=MVSGLT1.GT15.SDFSRESL  
//IXPC1 DD DISP=SHR,DSN=MVSGLT1.XRF.COBOLLIB  
//BMCTRACE DD SYSOUT=*  
//BMCMSG DD DISP=SHR,DSN=MVSGLT1.XRF.BMCMSG(#IMP01)  
//BMCPRINT DD SYSOUT=*  
//DBDOUT DD SYSOUT=*  
//SYSUDUMP DD SYSOUT=*  
//PLUSIN DD *  
DECODE DBD(MATST1) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)
```

IXPC1 – COBOL or PL/I
SRCLIB – Output Source

```
04/11/2025          B M C   M E S S A G E   L O G          PAGE 1  
  
7:26:00.28  L O G   S T A R T  
7:26:00.30  BMC90022I  BMC UTILITY DRIVER STARTED  
7:26:00.31          LISTING OF 'PLUSIN  ' CONTROL STATEMENTS:  
7:26:00.31          -----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----+-----8          REC  CMD  
7:26:00.31          DECODE DBD(MATST1) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)          00260009          001   001  
7:26:00.31          DATA SET CONTAINS 0001 RECORDS  
7:26:00.35  BMC90026I  IMS 15.5  
7:26:00.92  BMC90000I  CPYBOOK: MATST1  .MA1ROOT -MA1ROOT [          ]**NOT FOUND  
7:26:00.92  BMC90000I  CPYBOOK: MATST1  .MA1DEP1 -MA1DEP1 [          ]**FOUND  
7:26:01.14  BMC90000I  CPYBOOK: MATST1  .MA1DEP2 -MA1DEP2 [          ]**FOUND  
7:26:01.35  BMC90023I  BMC UTILITY DRIVER ENDED. RETURN CODE IS 0000  
7:26:01.35  L O G   E N D
```

DBD + Copybook = Enhanced Source

[illegible]

Decoding – Using File-Aid definitions

```
//DECODE EXEC PGM=DLIGENTR,REGION=0M,PARM='ULU,DBI'
//STEPLIB DD DISP=SHR,DSN=BMCDBU.V51QA.SMPE.DBULIB
// DD DISP=SHR,DSN=IMSVS.R15M.SDFSRESL
// DD DISP=SHR,DSN=DBU.QA.ALL.PASSWORD
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.SXVJLOAD
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.CXVJLOAD
//SRCLIB DD DISP=SHR,DSN=MVSGLT1.XRF.IMPORT
//IMS DD DISP=SHR,DSN=MVSGLT1.XRF.DBDLIB
//DFSRESLB DD DISP=SHR,DSN=BNB.IMSVS.R15.SDFSRESL
// DD DISP=SHR,DSN=IMSVS.R15M.SDFSRESL
//IXPC1 DD DISP=SHR,DSN=MVSGLT1.XRF.COBOILLIB
//IXPFD DD DISP=SHR,DSN=MVSGLT1.XRF.XREFC
//BMCTRACE DD SYSOUT=*
//BMCMSG DD DISP=SHR,DSN=MVSGLT1.XRF.BMCMSG(#IMP03)
//BMCPRINT DD SYSOUT=*
//DBDOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//PLUSIN DD *
DECODE DBD(MCTST*) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)
***** Bottom of Data *****
```

IXPC1 – COBOL or PL/I

IXPFD – File-Aid XREF

SRCLIB – Output Source

```
11:35:56.26 L O G S T A R T
11:35:56.28 BMC90022I BMC UTILITY DRIVER STARTED
11:35:56.29 LISTING OF 'PLUSIN ' CONTROL STATEMENTS:
11:35:56.29 -----1-----2-----3-----4-----5-----6-----7-----8 REC CMD
11:35:56.29 DECODE DBD(MCTST*) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE) 00280000 001 001
11:35:56.29 DATA SET CONTAINS 0001 RECORDS
11:35:56.34 BMC90026I IMS 15.5
11:35:57.01 BMC90000I CPYBOOK: MCTST1 .MC1ROOT -MC1RCPY [ ]**FOUND
11:35:57.31 BMC90000I CPYBOOK: MCTST1 .MC1DEP1 -MC1D1CPY[ ]**FOUND
11:35:57.54 BMC90000I CPYBOOK: MCTST1 .MC1DEP2 -MC1D2CPY[ ]**FOUND
11:35:57.85 BMC90000I CPYBOOK: MCTST2 .MC2ROOT -MC2RCPY [ ]**FOUND
11:35:58.06 BMC90000I CPYBOOK: MCTST2 .MC2DEP1 -MC2D1CPY[ ]**FOUND
11:35:58.29 BMC90000I CPYBOOK: MCTST2 .MC2DEP2 -MC2D2CPY[ ]**FOUND
11:35:58.58 BMC90023I BMC UTILITY DRIVER ENDED. RETURN CODE IS 0000
11:35:58.58 L O G E N D
```

Decoding – Mapping Segment to Copybook

```
//DECODE EXEC PGM=DLIGENTR,REGION=0M,PARM='ULU,DBI'
//STEPLIB DD DISP=SHR,DSN=BMCDDBU.V51QA.SMPE.DBULIB
// DD DISP=SHR,DSN=BNB.IMSVS.R15.SDFSRESL
// DD DISP=SHR,DSN=DBU.QA.ALL.PASSWORD
//SRCLIB DD DISP=SHR,DSN=MVSGLT1.XRF.IMPORT
//IMS DD DISP=SHR,DSN=MVSGLT1.XRF.DBDLIB
//DFSRESLB DD DISP=SHR,DSN=BNB.IMSVS.R15.SDFSRESL
// DD DISP=SHR,DSN=IMSVS.R15M.SDFSRESL
//IXPC1 DD DISP=SHR,DSN=MVSGLT1.XRF.COBOLLIB
//IXPFD DD DISP=SHR,DSN=MVSGLT1.XRF.XREFC
//XREFCTL DD * (COLUMNS DON'T MATTER, ONLY SPACES)
        MAP MATST2  MA2ROOT  MA2RC1
        MAP MATST2  MA2DEP1  MA2D1C1
        MAP MATST2  MA2DEP2  MA2D2C1
//BMCTRACE DD SYSOUT=*
//BMCMMSG DD DISP=SHR,DSN=MVSGLT1.XRF.BMCMMSG(#IMP02)
//BMCPRI NT DD SYSOUT=*
//DBDOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//PLUSIN DD *
        DECODE DBD(MATST2) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)
```

XREFCTL – MAP dbd segm copybook

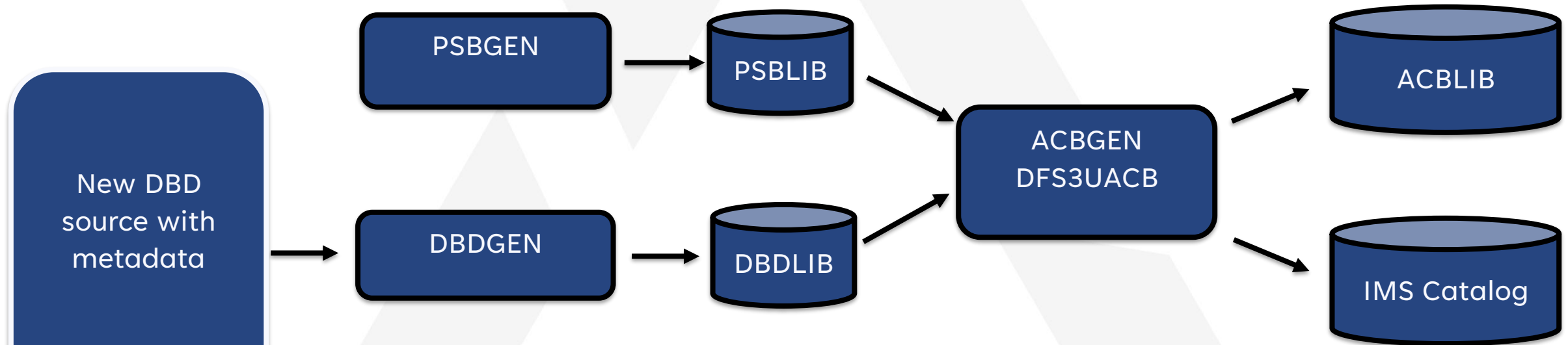
```
11:35:33.51 LOG START
11:35:33.54 BMC90022I BMC UTILITY DRIVER STARTED
11:35:33.55 LISTING OF 'PLUSIN ' CONTROL STATEMENTS:
11:35:33.55 -----1-----2-----3-----4-----5-----6-----7-----8      REC  CMD
11:35:33.55 DECODE DBD(MATST2) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)      00460008  001  001
11:35:33.55 DATA SET CONTAINS 0001 RECORDS
11:35:33.58 BMC90026I IMS 15.5
11:35:34.19 BMC90000I CPYBOOK: MATST2 .MA2ROOT -MA2RC1 [ ]**FOUND
11:35:34.49 BMC90000I CPYBOOK: MATST2 .MA2DEP1 -MA2D1C1 [ ]**FOUND
11:35:34.69 BMC90000I CPYBOOK: MATST2 .MA2DEP2 -MA2D2C1 [ ]**FOUND
11:35:34.93 BMC90023I BMC UTILITY DRIVER ENDED. RETURN CODE IS 0000
11:35:34.93 LOG END
```

Decoding – Using all together

```
//DECODE EXEC PGM=DLIGENTR,REGION=0M,PARM='ULU,DBI'
//STEPLIB DD DISP=SHR,DSN=BMCDDBU.V51QA.SMPE.DBULIB
// DD DISP=SHR,DSN=IMSVS.R15M.SDFSRESL
// DD DISP=SHR,DSN=DBU.QA.ALL.PASSWORD
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.SXVJLOAD
// DD DISP=SHR,DSN=CSGI.CPWR.FILEAID.CXVJLOAD
//SRCLIB DD DISP=SHR,DSN=MVSGLT1.XRF.IMPORT
//IMS DD DISP=SHR,DSN=MVSGLT1.XRF.DBDLIB
//DFSRESLB DD DISP=SHR,DSN=BNB.IMSVS.R15.SDFSRESL
// DD DISP=SHR,DSN=IMSVS.R15M.SDFSRESL
//IXPC1 DD DISP=SHR,DSN=MVSGLT1.XRF.COBOLLIB
//IXPFD DD DISP=SHR,DSN=MVSGLT1.XRF.XREFC
//* MCTSTX IS A COMBINED XREF THAT HAS BOTH MCTST1 AND MCTST2 DBDS
//XREFCTL DD *
    XREF MCTST1 MCTSTX
    XREF MCTST2 MCTSTX
//BMCTRACE DD SYSOUT=*
//BMCMSG DD DISP=SHR,DSN=MVSGLT1.XRF.BMCMSG(#IMP04)
//BMCPRINT DD SYSOUT=*
//PLUSIN DD *
DECODE DBD(MCTST*) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)
```

```
11:36:21.88          DECODE DBD(MCTST*) SOURCE(IMS) IMPORT(Y) ONEXIST(UPDATE)          00210000      001  001
11:36:21.88          DATA SET CONTAINS 0001 RECORDS
11:36:21.91 BMC90026I  IMS 15.5
11:36:22.37 BMC90000I  CPYBOOK: MCTST1 .MC1ROOT -MC1RCPY [                ]**FOUND
11:36:22.62 BMC90000I  CPYBOOK: MCTST1 .MC1DEP1 -MC1DEP1 [                ]**FOUND
11:36:22.80 BMC90000I  CPYBOOK: MCTST1 .MC1DEP2 -MC1DEP2 [                ]**FOUND
11:36:23.09 BMC90000I  CPYBOOK: MCTST2 .MC2ROOT -MC2RC1 [                ]**FOUND
11:36:23.31 BMC90000I  CPYBOOK: MCTST2 .MC2ROOT -MC2RC2 [                ]**FOUND
11:36:23.53 BMC90000I  CPYBOOK: MCTST2 .MC2ROOT -MC2RC3 [                ]**FOUND
11:36:23.75 BMC90000I  CPYBOOK: MCTST2 .MC2DEP1 -MC2D1C1 [                ]**FOUND
11:36:23.93 BMC90000I  CPYBOOK: MCTST2 .MC2DEP1 -MC2D1C2 [                ]**FOUND
11:36:24.15 BMC90000I  CPYBOOK: MCTST2 .MC2DEP1 -MC2D1C3 [                ]**FOUND
11:36:24.36 BMC90000I  CPYBOOK: MCTST2 .MC2DEP2 -MC2D2C3 [                ]**FOUND
11:36:24.55 BMC90000I  CPYBOOK: MCTST2 .MC2DEP2 -MC2D2C1 [                ]**FOUND
11:36:24.71 BMC90000I  CPYBOOK: MCTST2 .MC2DEP2 -MC2D2C2 [                ]**FOUND
11:36:24.97 BMC90023I  BMC UTILITY DRIVER ENDED. RETURN CODE IS 0000
11:36:24.97 L O G   E N D
```

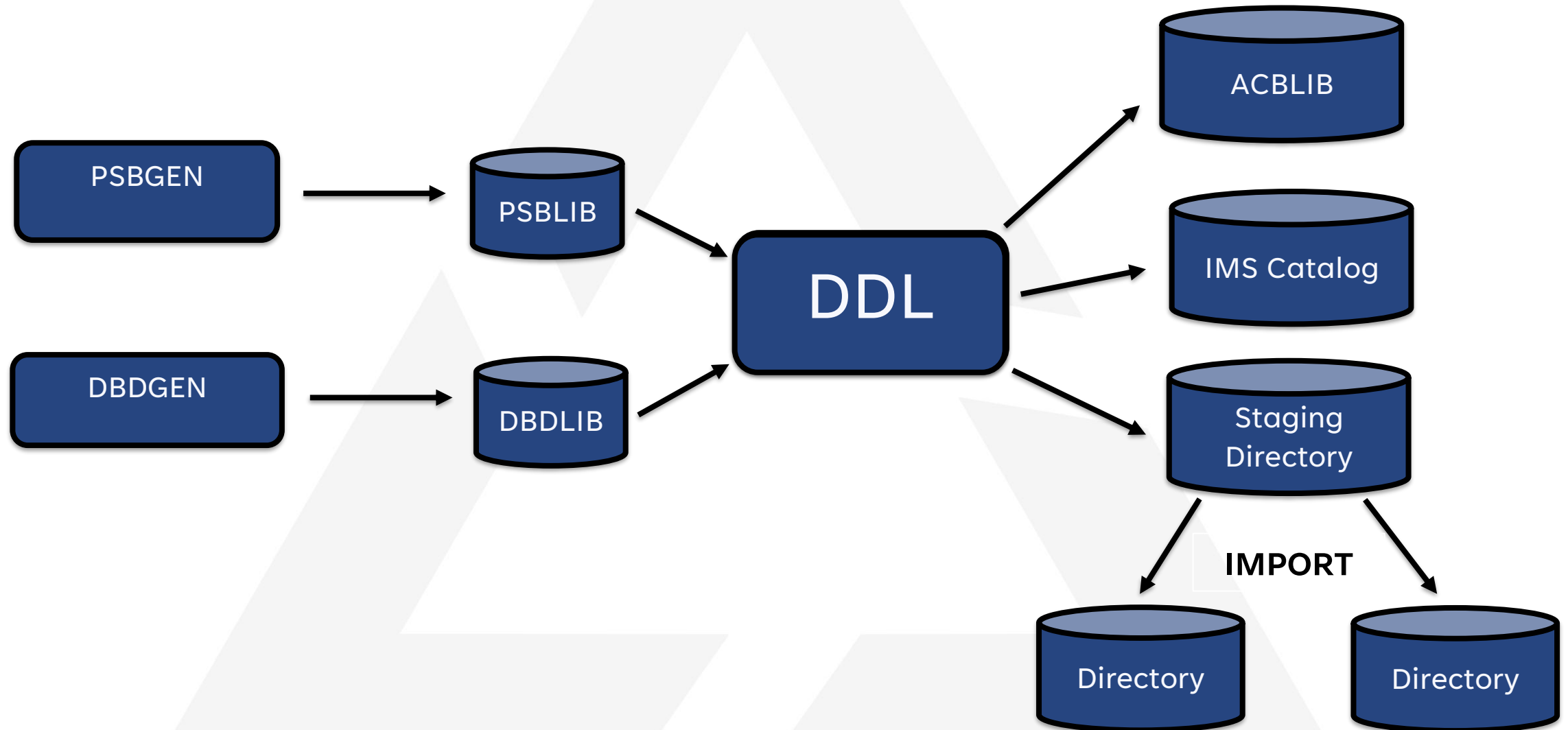
Populating IMS Catalog with metadata





DDL – THE NEXT GENERATION

Making changes with DDL



Before and After - DBD

DBD NAME=B1FVDP, X
ACCESS=(HDAM,VSAM), X
RMNAME=(DFSHDC40,8,64,), X
VERSION='09/25/2410.03'

*

DSG1 DATASET DD1=B1DDN,DEVICE=3390, X
,SIZE=4096

*

SEGM NAME=SEG0, X
BYTES=256, X
PARENT=0
FIELD BYTES=8, X
START=1, X
TYPE=X, X
NAME=(KEY0,SEQ,U)

CREATE DATABASE B1FVDP ACCESS HDAM VSAM
VERSION '09/25/2410.03'
RMNAME(DFSHDC40 RMANCH 8 RMRBN 64);

CREATE TABLESPACE B1DDN IN B1FVDP SIZE
PRIMARY 4096;

CREATE TABLE SEG0 (
KEY0 CHAR(8) START 1 TYPE X INTERNALNAME
KEY0 PRIMARY KEY
)
MAXBYTES 256 TWIN INTERNALNAME SEG0 IN
B1FVDP.B1DDN;

Before and After - PSB

```

PCB
TYPE=DB,DBDNAME=GLT01D,KEYLEN=51,PROCOPT=A,
X
    PCBNAME=A1
    SENSEG NAME=PROOT,PARENT=0
    SENSEG NAME=PLVL2,PARENT=PROOT
    SENSEG NAME=PLVL3,PARENT=PLVL2
*
    PCB
    TYPE=DB,DBDNAME=GLT01D,KEYLEN=51,PROCOPT=A,
    X
        PCBNAME=B1
        SENSEG NAME=PROOT,PARENT=0
        SENSEG NAME=PLVL2,PARENT=PROOT
        SENSEG NAME=PLVL3,PARENT=PLVL2
*
    PSBGEN
    PSBNAME=GLT01P,LANG=COBOL,CMPAT=YES,SSASIZE=8
    40,    X
        IOASIZE=600
    END
  
```

```

CREATE PROGRAMVIEW GLT01P (
    CREATE SCHEMA DB A1 USING GLT01D AS PCB_A1_A
    (CREATE SENSEGVIEW PROOT WITH PROCOPT 'A',

CREATE SENSEGVIEW
    PLVL2 WITH PROCOPT 'A',CREATE SENSEGVIEW PLVL3
    WITH PROCOPT 'A' )
    PROCOPT 'A',

CREATE SCHEMA DB B1 USING GLT01D AS PCB_B1_A
    (CREATE SENSEGVIEW PROOT WITH PROCOPT 'A',CREATE
    SENSEGVIEW
    PLVL2 WITH PROCOPT 'A',CREATE SENSEGVIEW PLVL3
    WITH PROCOPT 'A' )
    PROCOPT 'A')
    IOASIZE 600 SSASIZE 840 CMPATYES LANGASSEM ;
  
```

Executing DDL

- **Can't use SPUFI - only for DML operations (Read, Update, Insert, Delete)**
- **SQL Batch - requires ODBM**
- **zDDL - native IMS DDL calls - DFS3ID00 - Data Definition Utility**
- **IMS supports the standard CREATE, ALTER, and DROP DDL statements to build, modify, and delete IMS databases and program views.**

SQL Batch

```
File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      MVSGLT1.GT15.JCL(SQL2) - 01.06      Columns 00001 00080
Command ==>                                     Scroll ==> CSR
***** ***** Top of Data *****
000001 //GT15SQLJ JOB (5810),'SQL JOB',CLASS=A,MSGCLASS=X,
000002 //          NOTIFY=&SYSUID,REGION=0M
000003 //*-----
000004 //*  SQL BATCH UTILITY
000005 //*-----
000006 //          EXPORT SYMLIST=*
000007 // SET P1='com.ibm.ims.jdbc.batch.BatchUtil'
000008 //*
000009 //DDLSQL EXEC PGM=JVMLDM80,REGION=0M,PARM='/ &P1'
000010 //STEPLIB      DD DISP=SHR,DSN=SYS1.SIEALNKE
000011 //          DD DISP=SHR,DSN=CEE.SCEERUN
000012 //SYSPRINT     DD SYSOUT=*
000013 //SYSOUT        DD SYSOUT=*
000014 //STDERR        DD SYSOUT=*
000015 //STDOUT        DD SYSOUT=*
000016 //IMSSQL       DD  *,SYMBOLS=JCLONLY
000017 CONNECT jdbc:ims://sysp:8435/DFSCP001;
000018 DROP PROGRAMVIEW C1PSBA IF EXISTS;
000019 COMMIT DDL;
000020 DISCONNECT;
000021 //STDENV       DD DISP=SHR,DSN=MVSGLT1.GT15.PROCLIB($$ENV)
```

IMS Data Definition utility (DFS3ID00)

```
File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      MVSGLT1.GT15.JCL(ZDDLJOB) - 01.04      Columns 00001 00080
Command ==> Scroll ==> CSR
***** Top of Data *****
000001 //GT15ZDDL JOB (5810),'TURNER',MSGCLASS=X,
000002 //          NOTIFY=&SYSUID,
000003 //          CLASS=A,REGION=0M
000004 //*
000005 //*      SAMPLE ZDDL BATCH UTILITY
000006 //*
000007 //BMP      EXEC  PGM=DFS3ID00,
000008 //          PARM=(BMP,DFS3ID00,DFSCP001,,,,,,,,,GT15,,,,,)
000009 //*
000010 //STEPLIB DD DSN=MVSGLT1.GT15.SDFSRESL,DISP=SHR
000011 //          DD DSN=MVSGLT1.GT15.DYNLIB,DISP=SHR
000012 //DFSRESLB DD DSN=MVSGLT1.GT15.SDFSRESL,DISP=SHR
000013 //PROCLIB DD DSN=MVSGLT1.GT15.PROCLIB,DISP=SHR
000014 //SYSPRINT DD SYSOUT=*
000015 //IMSSQL DD *
000016 DROP PROGRAMVIEW C1PSBA IF EXISTS;
000017 DROP DATABASE C1FVDP IF EXISTS;
000018 COMMIT DDL;
000019 //
***** Bottom of Data *****
```



DEMO

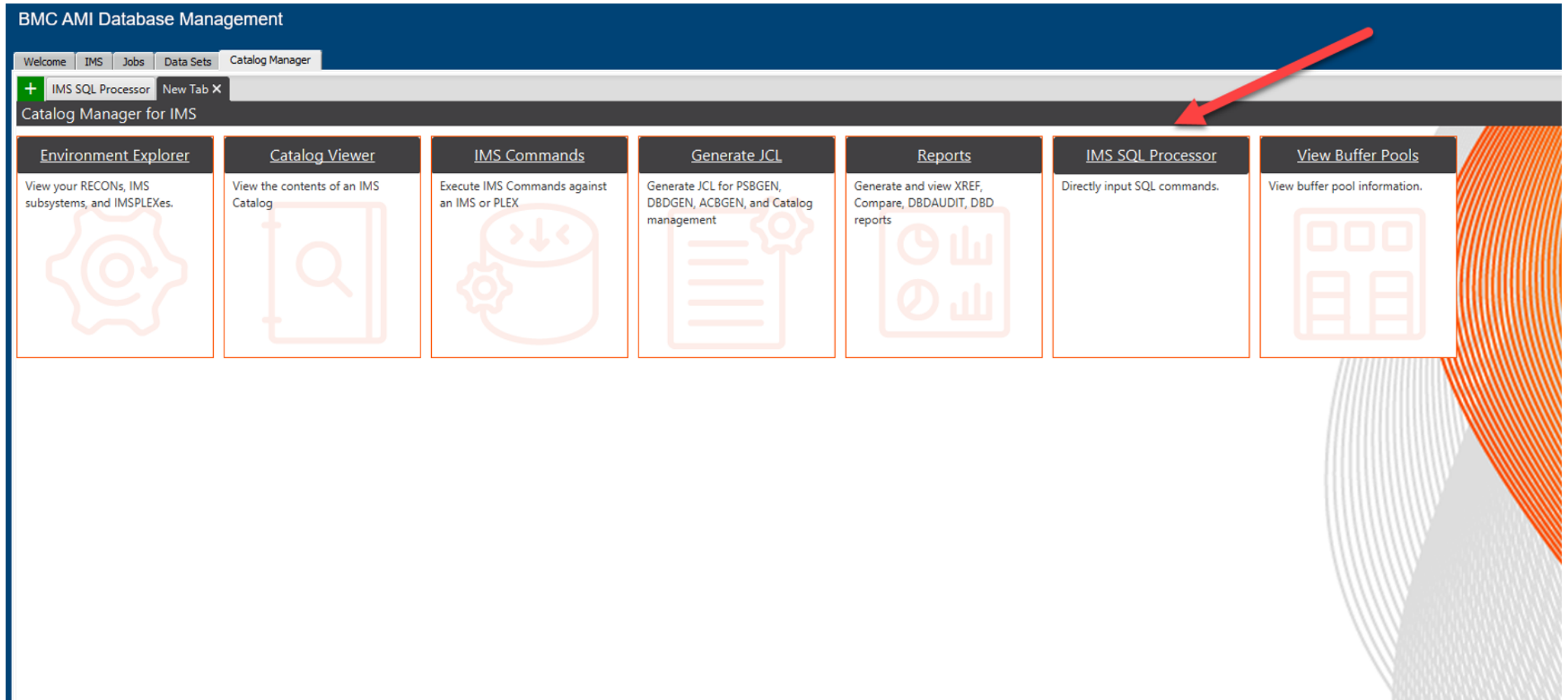


GUIDED SPUFI: MAKING SQL SIMPLE FOR IMS DINOSAURS

SPUFI – SQL Processor Using File Input

- **Build and execute SQL commands interactively**
- **View the results immediately**
- **Uses IMS Connect and ODBM**
- **SQL Interface provided with the Command Center**

Original SPUFI



Original SPUFI

BMC AMI Database Management

Welcome IMS Jobs Data Sets **Catalog Manager**

+ IMS SQL Processor X New Tab

Catalog Manager for IMS

IMS PLEX: IMSPL IMS Alias: IBPL ODBM Port: 8432 PSB Name: DFSCP001 Total row to fetch in SELECT query:

SQL Query:

SELECT HEADER.ACTTS, HEADER.IMSNAME, HEADER.LEN, HEADER.RHDRSEQ, DBD.CATVERS, DBD.RMNAME, DBD.TSVERS FROM HEADER,DBD

Run Clear Abort

Messages:

Severity	Time	Message

Tab 1 X

Export...

ACTTS	IMSNAME	LEN	RHDRSEQ	CATVERS	RMNAME	TSVERS	
0x25028F11271920	CUSTHDAM	200	DBD CUSTHDAM	0	DFSHDC40	2502811271920	
0x25028F11271920	CUSTHIDM	200	DBD CUSTHIDM	0		2502811271920	
0x25028F11271920	CUSTHISM	200	DBD CUSTHISM	0		2502811271920	
0x25028F11271920	CUSTINDX	200	DBD CUSTINDX	0		2502811271920	
0x0000000000000000	DBFSAMD1	200	DBD DBFSAMD1	0		1816608331261	
0x0000000000000000	DBFSAMD2	200	DBD DBFSAMD2	0		1816608331261	

New and Improved SPUFI

bmc AMI Command Center for IMS Database Management Console BMC AMI Command Center for DB2 Connection List

[Change Manager for IMS](#) [Database Advisor for IMS](#) [System Administration for IMS](#)

Projects Apps

+ New Tab x

Diagnose/Explore ^

- Environment Explorer
- Data Explorer
- DBD Schema Editor
- PSB Schema Editor
- SPUFI**
- Database Integrity Reports
- Catalog Explorer

Tune ^

- Buffer Pool Editor

Implement ^

- IMS Commands
- Online Object Deploy
- Generate JCL Actions

Config ^

- Maintain Migration Groups

IMS Connect – Enter Credentials

Establish connection to IMS Connect for SQL calls

IMS Connect not connected, Please connect!

[Refresh](#)

ODBM (IMS Connect): (required)

S0W1:8432 (BMC1HWS)

ALIAS: (required)

BMC1

PSB: (required)

GLT01P

User Name (required)

mvsglt1

Password (required)

.....

Connect

Close

bmc

AMI

Command Center for IMS

Database Management Console

BMC AMI Command Center for DB2

Connection List

Change Manager for IMS

Database Advisor for IMS

System Administration for IMS

Projects

Apps

+

SPUFI

×

S0W1:8432 (BMC1HWS)

|

BMC1

|

GLT01P

Connected

Edit Connection

SQL Editor

SQL Generator

History

Result

×

Query Info

ODBM

S0W1:8432 (BMC1HWS)

ALIAS

BMC1

PSB

GLT01P

SQL

SELECT A1.PROOT.DESC_COL, A1.PROOT.PROOTK FROM A1.PROOT

Export

desc_col ↑↓	prootk ↑↓
RECEPTION CHAIR	4676465
COPY MACHINE	1922462
TAPE DISPENSER	1041227
PLASTIC KNIVES	4822855
3420 BLANK TAPES	3172332

SQL Generator

bmc

AMI Command Center for IMS

BMC AMI Command Center for DB2Connection List

Change Manager for IMSDatabase Advisor for IMSSystem Administration for IMSEnergizer for IMS Connect

ProjectsSPUFI+

SYSP:8435 (GT15ICON) | GT15 | DFSCP000ConnectedEdit Connection

SQL EditorSQL GeneratorHistory

SQL Query

```
1 SELECT HEADER.ACTTS, HEADER.IMSNAME, HEADER.SEQNUM as header_seqnum, HEADER.TYPE, DBD.CATVERS, DBD.PSNAME, DBD.RMNAME, DBD.TSVERS, DSET.CTL, DSET.RECFM, DSET.SEQNUM as dset_seqnum
2 FROM
3 HEADER,DBD,DSET
```

Copy to Editor

OperationsSelect

Select PCB:

DFSCAT00

Select Table: ?

DSET

Select Fields:

SEQNUM, CTL, RECFM

Reset

Where Clause

Order By Clause

Remove Duplicate Rows

Fetch First 'n' row(s):

Selected fields

HEADER.ACTTS xHEADER.IMSNAME xHEADER.SEQNUM xHEADER.TYPE xDBD.CATVERS xDBD.PSNAME xDBD.RMNAME xDBD.TSVERS xDSET.CTL xDSET.RECFM x

Filter

☐ DSETSEQ

☐ LEN

☒ CTL

☒ SEQNUM

☐ DD1

☐ DD2

Copyright© by SHARE Association Except where otherwise noted, this work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 license. <http://creativecommons.org/licenses/by-nc-nd/3.0/>



DEMO

Summary

- Minimize the effort to add COPYBOOK information to DBD source
- Native to z/OS, no transferring files back/forth
- Several methods available for IMPORT
- Build correct SQL every time
- Support for DDL or GEN syntax



Gary Turner
IMS Software Consultant





THANK YOU!!