

No Cost Way to Manage The IMS Catalog

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BMC Software

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Session HF



Abstract

The IMS Catalog has been around for a few releases, but is only recently getting attention from most IMS practitioners due to the IBM statement of direction that the IMS Catalog will be required in the future. Why should you use the catalog and how do you know what's in your catalog? Learn why you need to consider using the IMS catalog, the impact it is likely to have on your current processes and procedures and how the no-charge Catalog Manager for IMS offering from BMC can help you understand what is in your catalog, compare the catalog and ACBLIB and implement managed ACBs effectively.

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IBM Will Require the IMS Catalog

- **IMS 15 announcement - October 3, 2017**
 - “IBM intends to require **IMS management of ACBs** in the future.
 - **IMS and the IMS catalog must be set up to support ACB management.** IMS provides a utility for this.
 - After the requirement for IMS-managed ACBs is in place, IBM also intends to remove the generation processes for PSBLIB, DBDLIB, and ACBLIB. At that time, the IMS catalog, SQL, and DDL become the interface to IMS database management.”

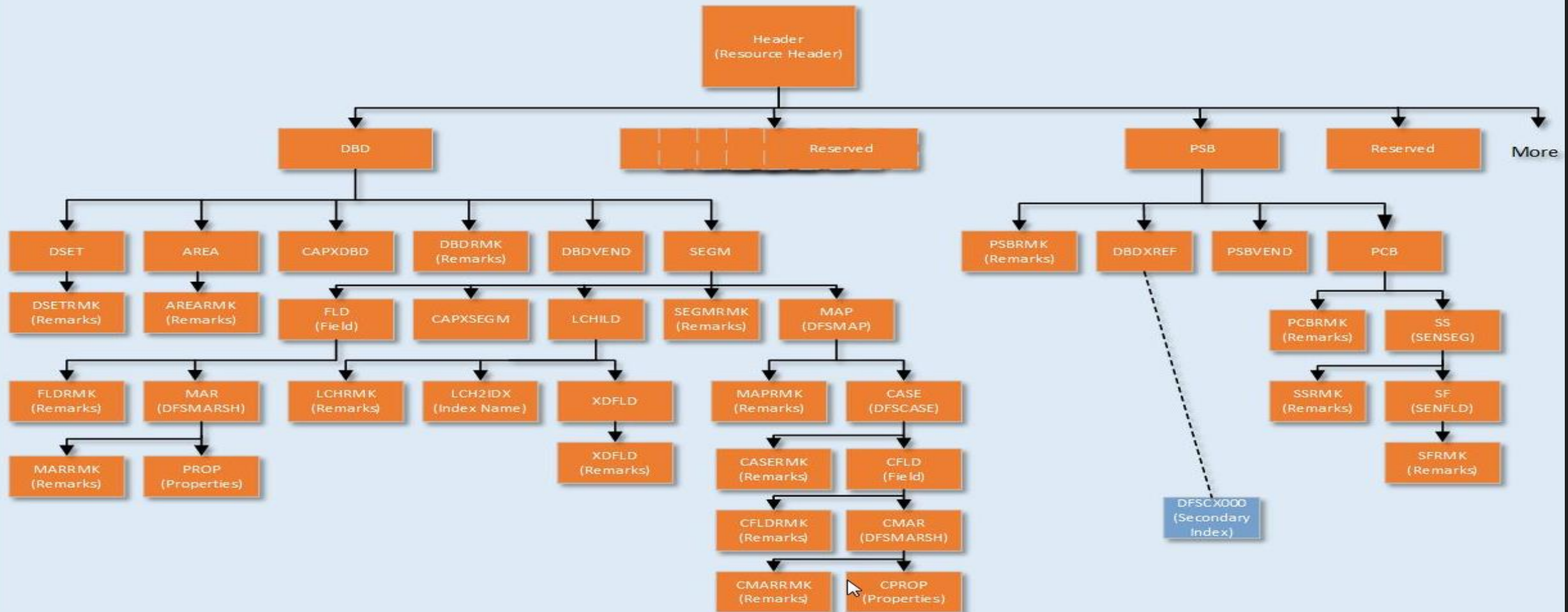
Why should you use the IMS Catalog?

- **Enables scalable and flexible IMS Open Database solutions**
 - Main purpose: Allow direct access to IMS databases from Java
 - Introduced the Single Source of Truth Concept with IMS v12
- **Natural next step for IMS Users with long-term IMS plans**
- **Provides a trusted online source for two types of metadata**
 - IMS Database
 - IMS Application

IMS Catalog Deployment Components

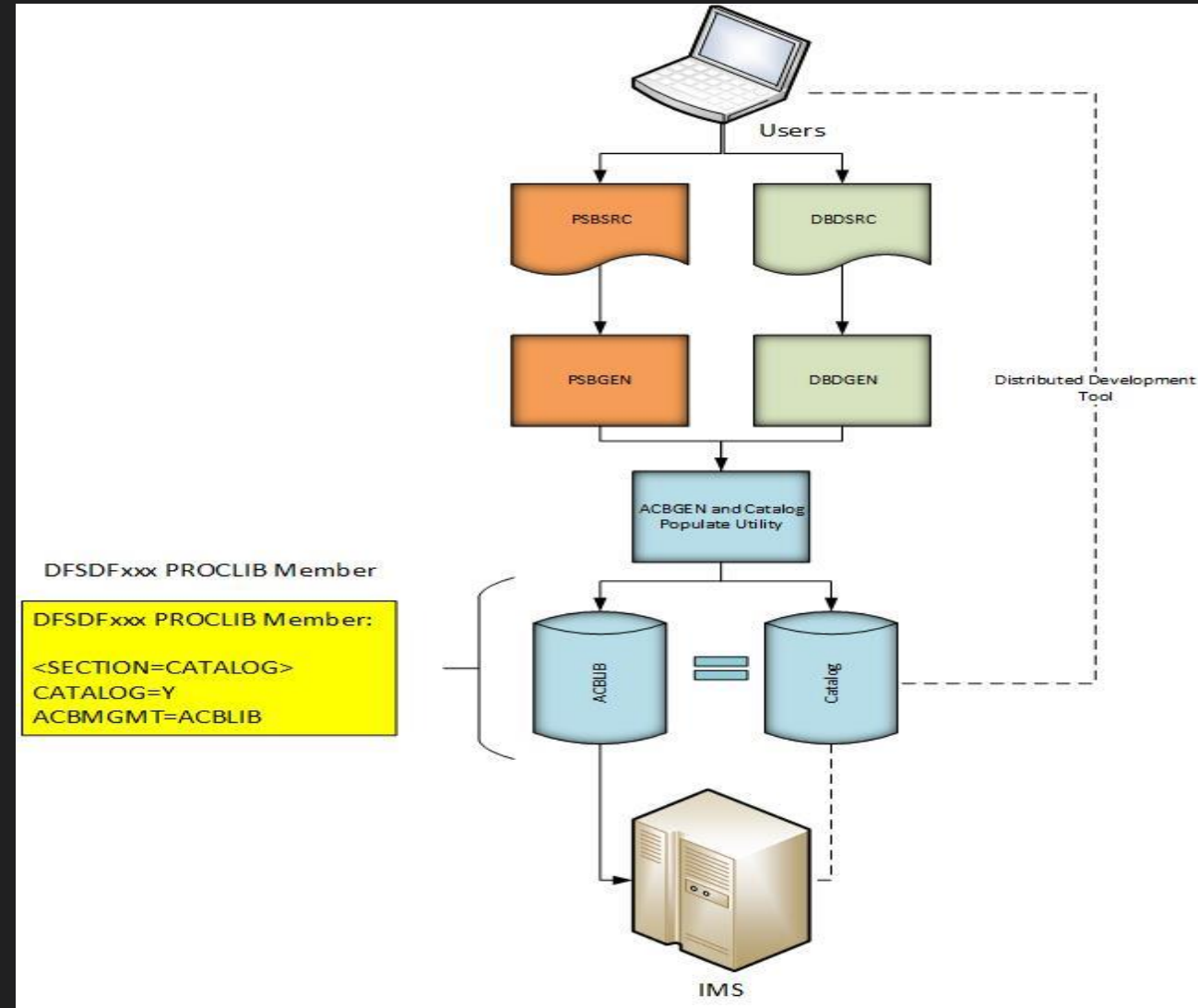
- **IMS Catalog database**
 - New repository for IMS application metadata
 - Data feed through catalog populate utility or DDL
- **IMS-managed ACBs**
 - New process for building and managing IMS Data Management blocks (DMBs) and Application Control Blocks (ACBs)
 - IMS Directory
 - New component that replaces the ACBLIB
 - IMS type-2 command commits changes to IMS DMB and ACB content into IMS subsystems

IMS Catalog is a HALDB database



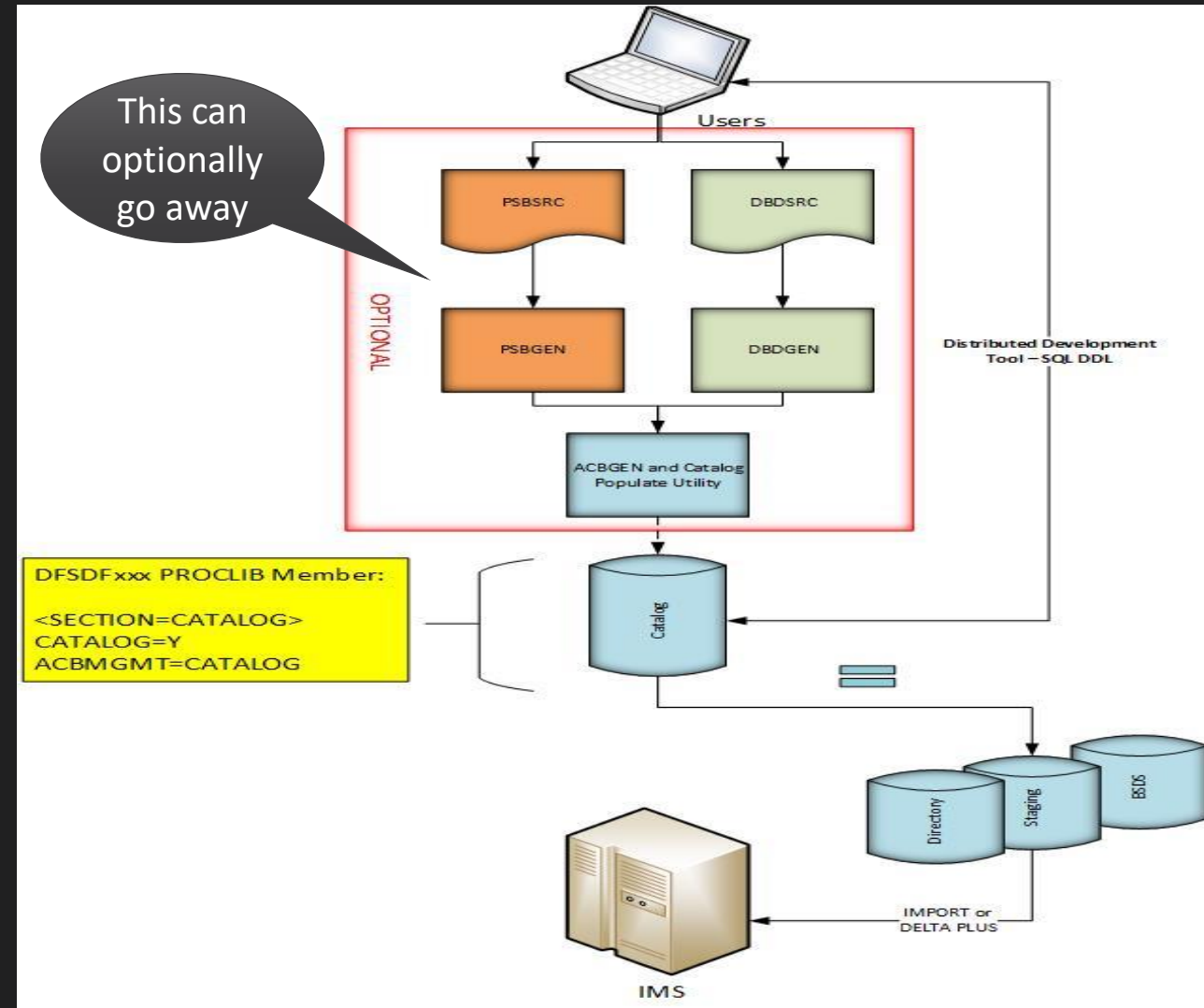
Using the Catalog Without IMS Managed ACB's

- Seen as an initial implementation approach
- Traditional DBD/PSB Gen Process
- New ACBGEN & Catalog Populate process
- Catalog must stay in sync with ACBLIB



Using the Catalog With IMS Managed ACB's

- Full Catalog Adoption
- DBD/PSB/ACB Gen's replaced by DDL
- Introduces the IMS Directory
- IMS type-2 IMPORT commands to commit changes to IMS
- DELTA PLUS to load ACB macros



Risks Associated with the IMS Catalog

- Changes to stable IMS maintenance procedures
- Batch out of sync conditions
- Purge out of sync conditions
- Catalog size will increase significantly
- Data sharing and backup and recovery advantages concerns

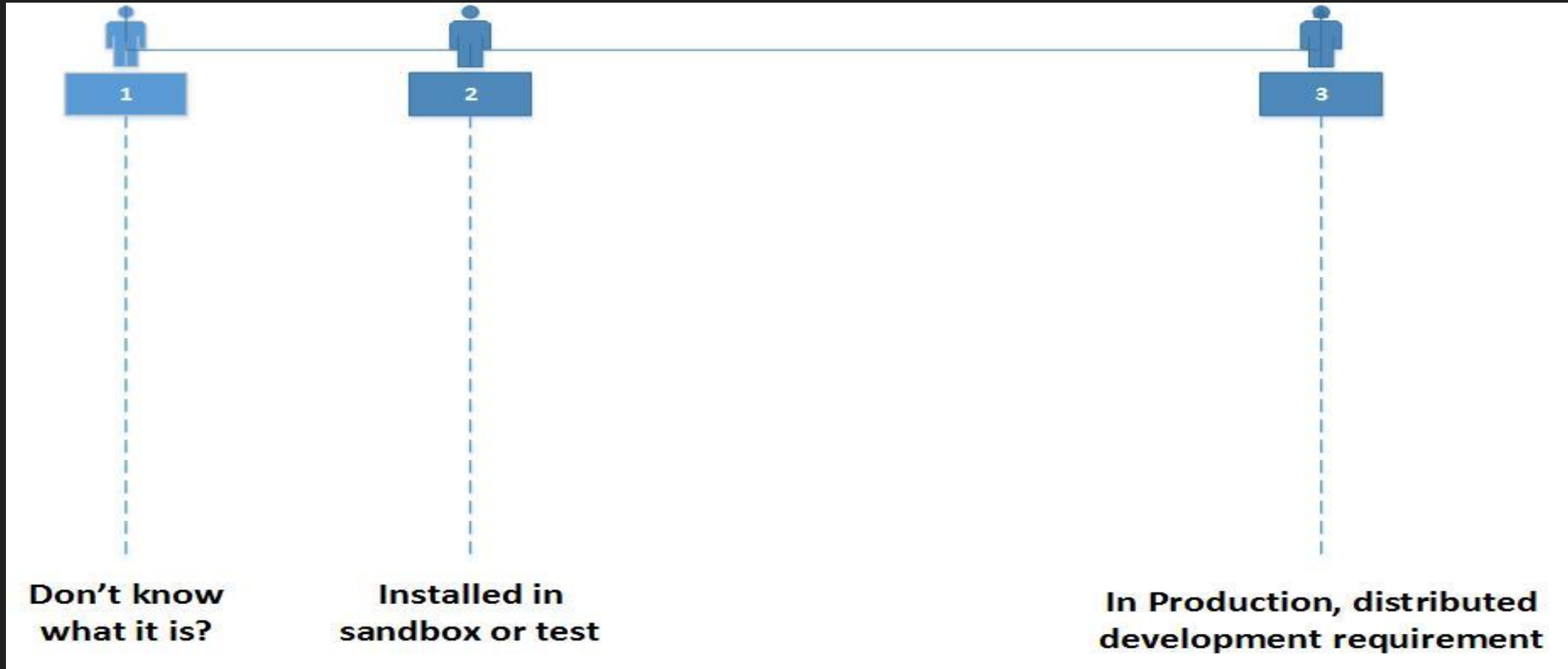
BMC Is All About The Catalog

A silhouette of a person in mid-air, jumping over a gap between two dark, jagged rock formations. The background is a bright blue sky with scattered white clouds and a large, glowing sun with lens flare effects. The overall scene conveys a sense of achievement and overcoming challenges.

**The catalog is the next
evolutionary step in IMS**



IMS Catalog User Status



How can I access the metadata? DLT0?

```
//SYSIN DD *  
O LCASE=C  
S1111 1 1 1 1DFSCAT00 AIB  
L 00001 GUR HEADER (RHDRSEQ ==DBD CUSTHDAM)  
L DBD (TSVERS ==1723207375619)  
L Z9999 DATA
```


Results are XML instance documents?

```
CALL=GUR      SEG=DBG      FIELD=TSVERS  OPER===      VALUE=1723207375619)

337  276776  32323226  6  66  6324733332277  6  632767233

SEGMENT = (CF8_%065239?>D21E0205>3?49>7D23010472034/>4/%?)5D29532FE<ns2:dbd xmlns:ns2="http://www.ibm.com/ims/D)
(BD" dbdName="CUSTHDAM" timestamp="1723207375619" version="01/11/0012.22" xmlSchemaVersion="1"><access)
(s dbType="HDAM"><hdam datxexit="N" password="N" osAccess="OSAM"><rmName name="DFSHDC40"><subOptions )
(anchorPoints="3" maxRBN="20" bytes="500"/></rmName><dataSetContainer><dataSet ddname="CUSTHDAM" lab)
(el="DSG1" searchA="0" scan="3"><size size="1690"/><frspc fspf="0" fbff="0"/></dataSet></dataSetConta)
(iner></hdam></access><segment imsName="CUSTOMER" name="CUSTOMER" encoding="Cp1047"><hdam label="DSG1)
("><bytes maxBytes="30"/><rules insertionRule="L" deletionRule="L" replacementRule="L" insertionLocat)
(ion="LAST"/><pointer physicalPointer="TWIN" lparnt="N" ctr="N" paired="N"/></hdam><field imsDatatype)
(="C" imsName="CUSTID" name="CUSTID" seqType="U"><startPos>1</startPos><bytes>25</bytes><marshaller e)
(ncoding="Cp1047"><typeConverter>CHAR</typeConverter></marshaller><applicationDatatype datatype="CHAR)
("/></field><segment imsName="PRODUCT" name="PRODUCT" encoding="Cp1047"><hdam physicalChildPointer="S)
(NGL" label="DSG1"><bytes maxBytes="25"/><rules insertionRule="L" deletionRule="L" replacementRule="L)
(" insertionLocation="LAST"/><pointer physicalPointer="TWIN" lparnt="N" ctr="N" paired="N"/></hdam><f)
(field imsDatatype="C" imsName="PROPID" name="PROPID" seqType="U"><startPos>1</startPos><bytes>10</byt)
(es><marshaller encoding="Cp1047"><typeConverter>CHAR</typeConverter></marshaller><applicationDatatyp)
(e datatype="CHAR"/></field><field imsDatatype="C" imsName="PURCHDTE" name="PURCHDTE"><startPos>11</s)
(artPos><bytes>6</bytes><marshaller encoding="Cp1047"><typeConverter>CHAR</typeConverter></marshalle)
(r><applicationDatatype datatype="CHAR"/></field><field imsDatatype="C" imsName="PRICE" name="PRICE">)
(<startPos>21</startPos><bytes>5</bytes><marshaller encoding="Cp1047"><typeConverter>CHAR</typeConver)
```

Catalog Viewer: Search Results

Welcome IMS Jobs Data Sets Catalog Manager

+ Catalog Viewer IMS Commands Catalog Viewer Reports Catalog Viewer X

Catalog Manager for IMS

- ▶ GXO3
 - ▼ MXO1
 - ▼ Catalog
 - ▼ PCBs
 - ▼ DFSCAT00
 - HEADER
 - DBD**
 - CAPXDBD
 - DBDRMK
 - DSET
 - DSETRMK
 - AREA
 - AREARMK
 - SEGM

Welcome		DBD X																			
HEADER_RHDRSEQ	LEN	CTL	S...	C...	DBDSEQ	TSVERS	RLVL	ACCESS	OSACC	PROT	DO...	PSN...	RMNAME	RMRBN	RM...	R...	R...	F...	P...	D...	FPI
DBD	ASM XO1DB	552	DB	1	0	0x00000000F1F8F0F1F0F1F0F1F8F0F2F4F7	2018-01-10 10:18:02.47	3587	HDAM	OSAM			DFSHDC40	500	90	20			N	N	01/10/1810.08
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F5F1F0F3F2F5F1F9F1	2017-04-07 10:01:08.43	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F5F1F4F4F0F1F1F1F1	2017-12-11 14:40:11.11	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F5F1F5F4F9F0F5F3F5	2017-12-11 15:49:05.35	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F8F1F5F2F8F4F9F3F0	2017-12-14 15:28:49.3	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F8F1F5F3F1F2F6F0F6	2017-12-14 15:31:26.06	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F4F8F1F5F3F8F0F8F1F2	2017-12-14 15:38:08.12	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F7F3F5F2F1F4F2F1F5F1F6F6	2017-12-18 14:21:51.66	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F8F0F0F3F1F4F0F5F2F1F4F6	2018-01-03 14:05:21.46	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS
DBD	AASHIC00	552	DB	1	0	0x00000000F1F8F0F0F3F1F4F1F8F4F5F1F8	2018-01-03 14:18:45.18	3587	HIDAM	OSAM				0	0	0			N	N	TEST FOR IMS R3.1 DISAS

Welcome		DBDs X																			
HEADER_RHDRSEQ	LEN	CTL	S...	C...	DBDSEQ	TSVERS	RLVL	ACCESS	OSACC	PROT	DO...	PSN...	RMNAME	R...	RM...	R...	R...	F...	P...	D...	FPI
DBD	CUSTHDAM	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F7F5F6F1F9	2017-08-20 07:37:56.19	3587	HDAM	OSAM			DFSHDC40	20	500	3			N	N	01/11/0012.22
DBD	CUSTHIDM	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F7F5F6F1F9	2017-08-20 07:37:56.19	3587	HIDAM	OSAM				0	0	0			N	N	01/11/0012.22
DBD	CUSTHISM	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F7F5F6F1F9	2017-08-20 07:37:56.19	3587	HISAM	VSAM				0	0	0			N	N	01/11/0012.22
DBD	CUSTINDX	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F7F5F6F1F9	2017-08-20 07:37:56.19	3587	INDEX	VSAM	PROT			0	0	0			N	N	01/11/0012.22
DBD	CUSTVSAM	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F7F5F6F1F9	2017-08-20 07:37:56.19	3587	HDAM	VSAM			DFSHDC40	20	500	3			N	N	01/11/0012.22

MAPRMK																					
CASE																					
CASERMK																					
CFLD																					
CFLDRMK																					

DBD	AAPEQI	552	DB	1	0	0x00000000F1F7F0F9F7F1F0F0F1F0F8F4F3	2017-04-07 10:01:08.43	3587	INDEX	VSAM	PROT			0	0	0			N	N	
DBD	AAPEQP	552	DB	1	0	0x00000000F1F7F0F9F7F1F0F0F1F0F8F4F3	2017-04-07 10:01:08.43	3587	HIDAM	VSAM				0	0	0			N	N	12/28/9623.30

Segment path: MXO1\DFSCP000\DFSCAT00\DBD rows: 3088

Severity	When	Message

BMC Catalog Manager for IMS

- **Functional capabilities**

- Catalog Viewer
- IMS commands
- Database Integrity Plus Catalog reports
- JCL generator for PSBs, DBDs, ACBs
- Environment Explorer

5 REASONS YOUR IMS TEAM NEEDS CATALOG MANAGER FOR IMS

SHINING A LIGHT ON THE IMS CATALOG



IBM'S FUTURE DIRECTION
IBM's direction is to make the IMS catalog mandatory.





YOUR CATALOG PLAN
You're moving to the IMS Catalog and need to see what's in it.



YOU USE MANAGED ACBs
Your IMS system has managed ACBs generated from the IMS Catalog.



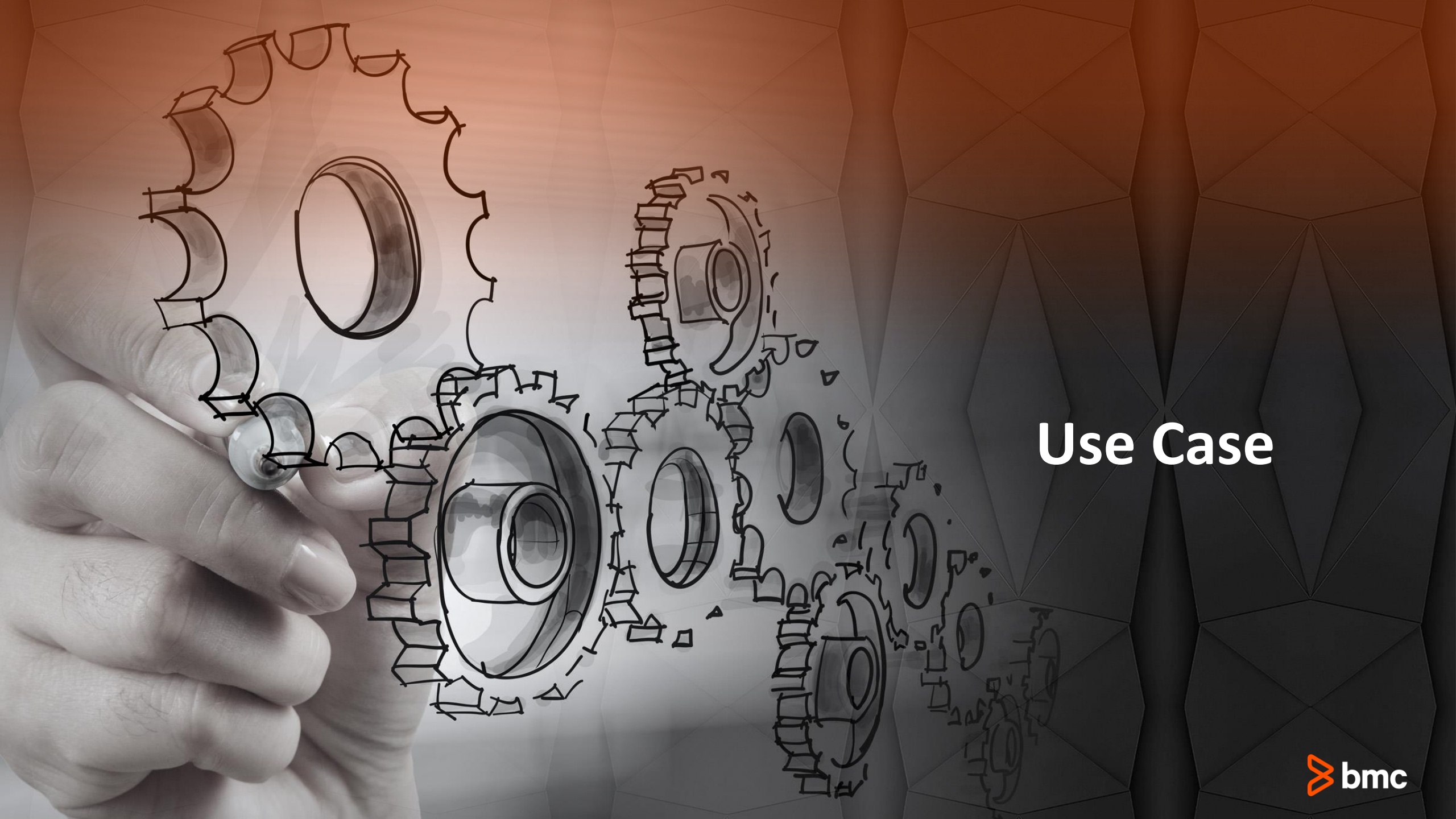
DATA VERIFICATION
You need to verify that the data in your IMS Catalog is correct.



LIMITED BUDGET
You want an IMS Catalog Manager without incurring added expense.

CATALOG MANAGER FOR IMS
NO-CHARGE OFFERING FOR BMC CUSTOMERS

SHINING A LIGHT ON THE IMS CATALOG AT BMC.COM/IMSCATALOG
CONTACT YOUR BMC REPRESENTATIVE FOR MORE INFORMATION



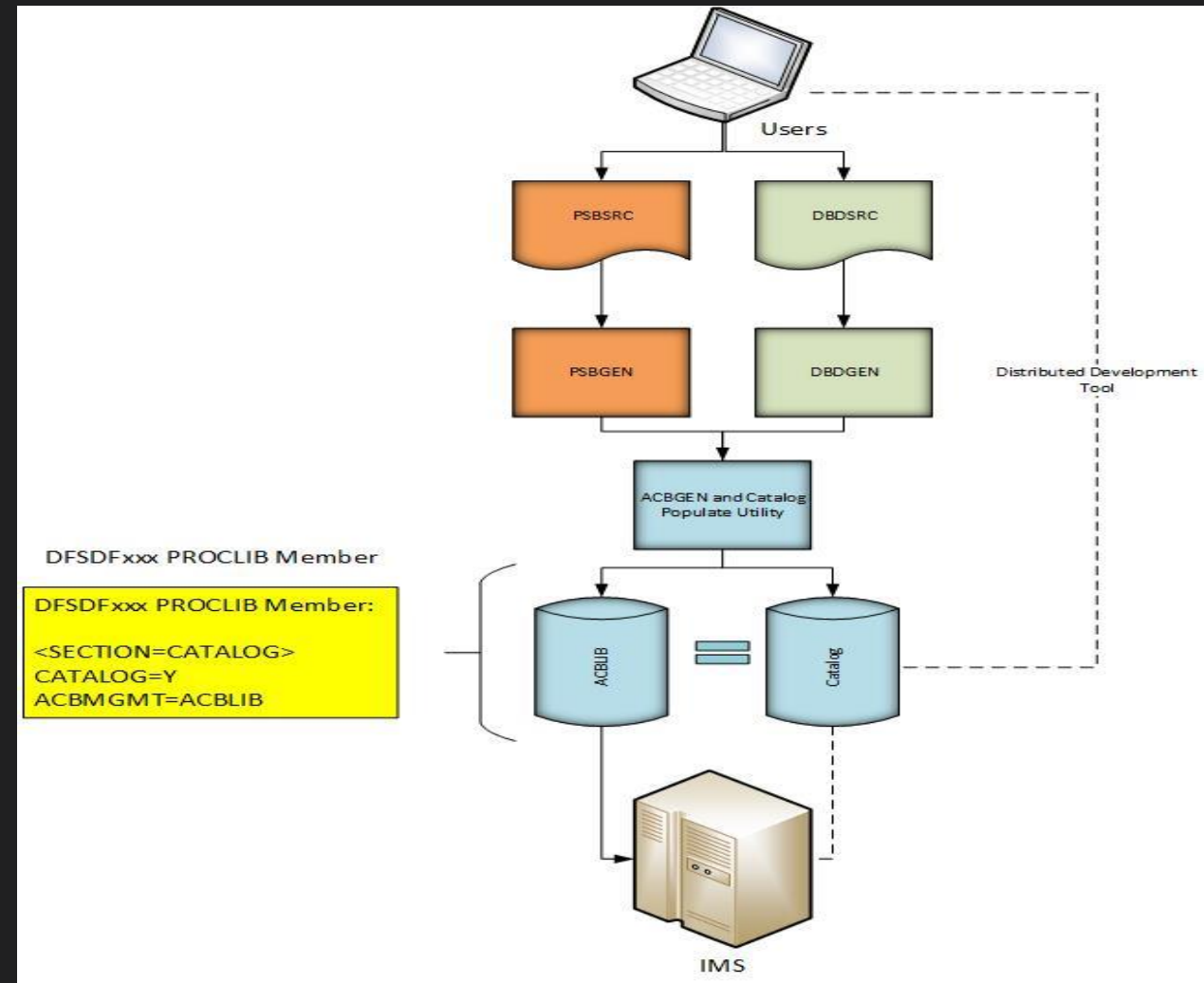
Use Case

Assume Catalog Implementation Without Managed ACB's

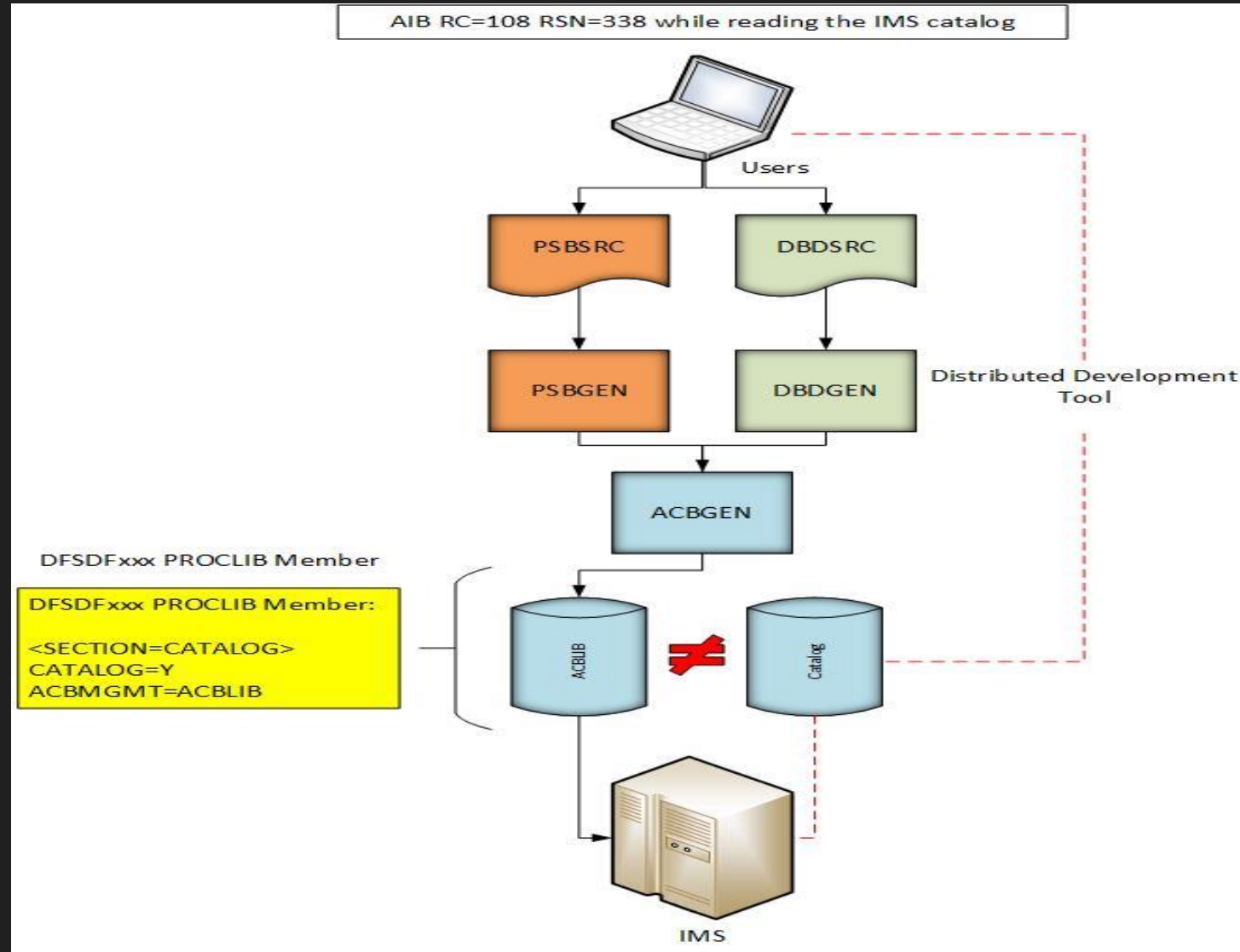
It's a new release weekend

You've made a change to a database

You want to verify everything is ready for Monday morning



We want to make sure this doesn't happen



Quickly Access IMS Catalog Metadata

BMC Database Management daw4 ▼


Welcome | IMS | Jobs | Data Sets | Catalog Manager

+ Catalog Viewer | IMS Commands | New Tab X

Catalog Manager for IMS


Catalog Viewer

View the contents of an IMS Catalog




IMS Commands

Execute IMS Commands against an IMS or PLEX




Generate JCL

Generate JCL for PSBGEN, DBDGEN, ACBGEN, and Catalog management




Reports


Generate and view XREF, Compare, DBDAUDIT, DBD reports



Environment Explorer

View your RECONs, IMS subsystems, and IMSPLEXes.





ready

Expand the Navigation Tree

Welcome | IMS | Jobs | Data Sets | Catalog Manager

+ Catalog Viewer | IMS Commands | Catalog Viewer | Catalog Viewer X

Catalog Manager for IMS

- MXO1
 - Catalog
 - PCBs
 - DFSCAT00**
 - HEADER
 - DBD
 - CAPXDBD
 - DBDRMK
 - DSET
 - DSETRMK
 - AREA
 - AREARMK
 - SEGM
 - CAPXSEGM
 - SEGMRMK
 - FLD
 - FLDRMK
 - MAR
 - MARRMK
 - PROP
 - LCHILD
 - LCHRMK
 - LCH2IDX
 - XDFLD

Welcome

Catalog Viewer

View the contents of an IMS Catalog

Getting Started

Select a node in the navigation tree, and then CLICK to expand it

As you drill down to a segment level, the segment's content will be displayed in a new tab

Navigation Tree Structure

The tree allows navigation between available IMSPLEXs

Under each IMSPLEX there is a list of IMS datastores' aliases

Under each IMS datastore alias there are three navigation options:

1. Catalog - view the content of the IMS Catalog (based on DFSCP000 PSB)
2. PSBs - view all the PSBs defined to the IMS, under each PSB there is a list of the associated PCBs and segments
3. DBDs - view all the DBDs defined to the IMS

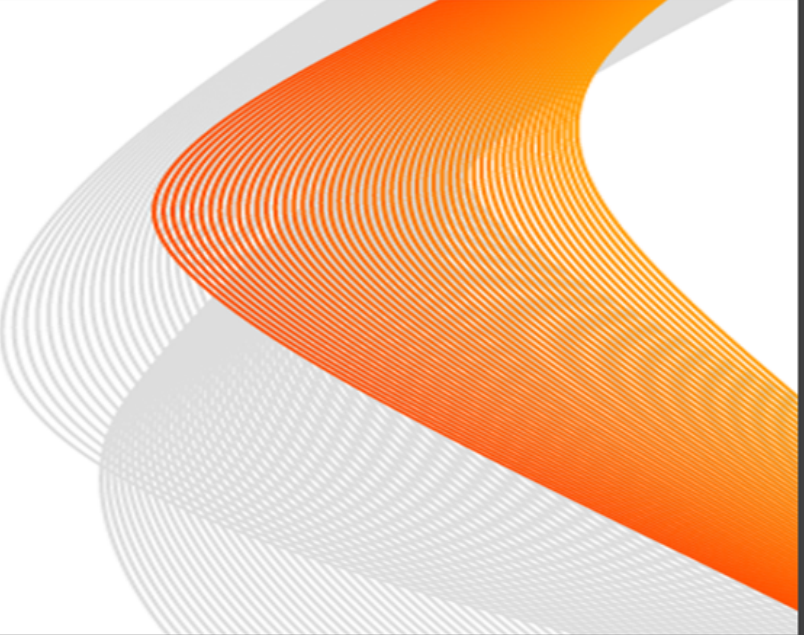
Filtering Options

1. Limit Results - Filter either by a pattern or by limiting the number of rows being fetched from the database
The pattern can be a node prefix followed by an asterisk (e.g.: DFS*) or a full node name (e.g.: DFSCP000)
2. Display All - Deprecated for large databases
3. Query segment - Issue an SQL query against a specific segment

Severity	When	Message

ready

Expanded Navigation Tree for the IMS Catalog



Use SQL to Filter Results

Welcome IMS Jobs Data Sets Catalog Manager

+ Catalog Viewer X New Tab New Tab Generate JCL

Catalog Manager for IMS

- ▼ IMSPLEXs
 - ▼ PLX59
 - ▼ Q159
 - ▼ Catalog
 - ▼ PCBs
 - ▼ DFSCAT00
 - HEADER
 - DBD**
 - CAPXDBD
 - DBDRMK
 - DSET
 - DSETRMK
 - AREA
 - AREARMK
 - SEGM
 - CAPXSEGM
 - SEGMRMK
 - FLD
 - FLDRMK
 - MAR
 - MARRMK
 - PROP
 - LCHILD
 - LCHRMK
 - LCH2IDX
 - XDFLD
 - XDFLDRMK
 - MAP
 - MAPRMK
 - CASE
 - CASERMK
 - CFLD
 - CFLDRMK
 - CMAR

Welcome Search X

Searching Segment:


Selected datastore alias: Q159
Selected PSB: DFSCP000
Selected PCB: DFSCAT00
Selected Segment: DBD

Segment columns:

SQL conditions:

SELECT * FROM DFSCAT00.DBD WHERE HEADER_RHDRSEQ = 'DBD CUSTHDAM'

Number of rows to fetch:



Let's verify the DBD & PSB Timestamps in the Catalog (the Metadata)

Catalog Manager for IMS

IMS PLEXs

- PLX59
 - Q159
 - Catalog
 - PCBs
 - DFSCAT00
 - HEADER
 - DBD**
 - CAPXDBD
 - DBDRMK
 - DSET
 - DSETRMK
 - AREA
 - AREARMK
 - SEGM
 - CAPXSEGM
 - SEGMRMK
 - FLD
 - FLDRMK
 - MAR
 - MARRMK
 - PROP
 - LCHILD
 - LCHRMK
 - LCH2IDX
 - XDFLD
 - XDFLDRMK
 - MAP
 - MAPRMK
 - CASE
 - CASERMK
 - CFLD
 - CFLDRMK
 - CMAR

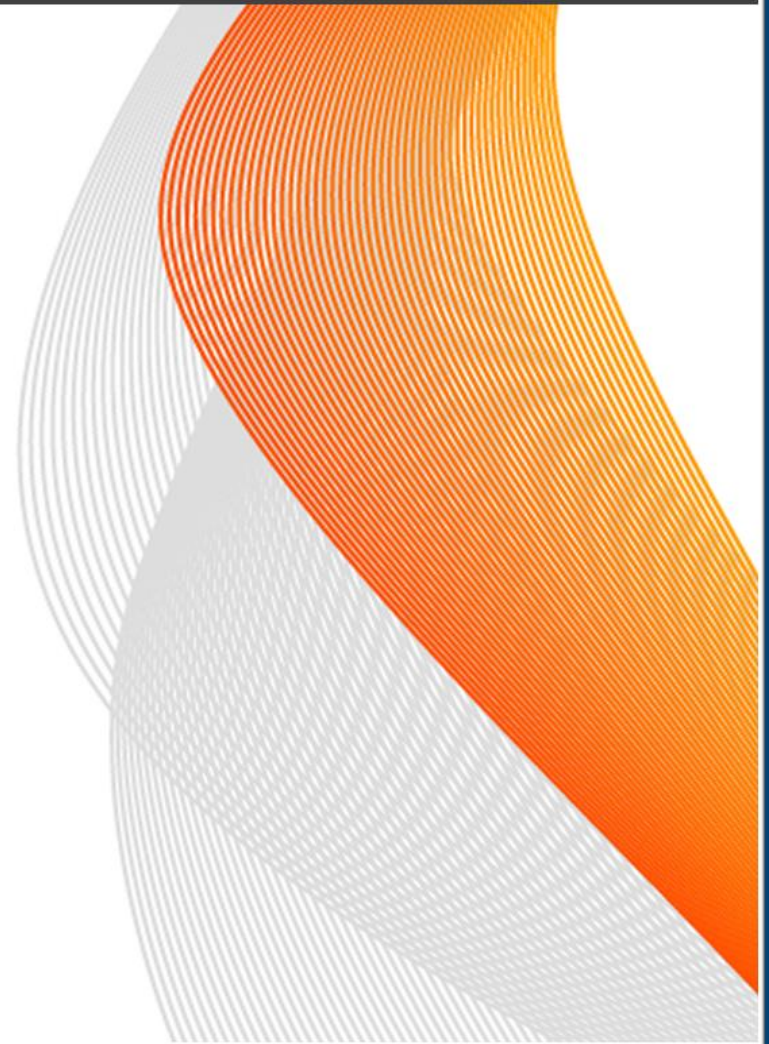
Welcome		DBD X		TSVERS															
HEADER_RHDRSEQ	LEN	CTL	S...	C...	DBDSEQ	ACCESS	OSACC	PROT	DO...	PSN...	RMNAME	R...	RM...	R...	R...	F...	P...	D...	FPI
DBD	CUSTHDAM	552	DB	1	0	0x00000000F1F7F2F3F2F0F7F3F	AM	OSAM			DFSHDC40	20	500	3			N	N	01/11/0012.22

Segment path: Q159\DFSCP000\DFSCAT00\DBD rows: 1

Make Note of the ACBGEN Timestamp

User Can't Access CUSTHDAM

<p>Catalog Viewer</p> <p>View the contents of an IMS Catalog</p> 	<p>IMS Commands</p> <p>Execute IMS Commands against an IMS or PLEX</p> 	<p>Generate JCL</p> <p>Generate JCL for PSBGEN, DBDGEN, ACBGEN, and Catalog management</p> 	<p>Reports</p> <p>Generate and view XREF, Compare, DBDAUDIT, DBD reports</p> 	<p>Environment Explorer</p> <p>View your RECONS, IMS subsystems, and IMSPLEXes.</p> 
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JES Viewer to review Xref SYSOUT

Jobs
syp:9910

Add Job Filter

Filter

Host:

Job Mask:

Pattern: Job Name (e.g., JOB*)
Hint: use * for wildcard

OK Cancel



Add Job Filter

Filter

Host:

Job Mask:

Pattern: Job Name (e.g., JOB*)
Hint: use * for wildcard

OK Cancel




JES Viewer to review Xref SYSOUT



Jobs
syp:99.10
BYJOBNAME: HV15*



Job Name: HV15* 

Job Name	Job Id	System	User Id	Class	Priority	Queue	Status
HV15JOB	28589		DAW4	A	1	OUTPUT	CC 0
HV15STRT	28527		STCUSER	A	1	OUTPUT	CC 16
HV15JIMA	25609		STCUSER	STC	1	OUTPUT	20
HV15ADV	25608		STCUSER	STC	1	OUTPUT	20
HV15	25607		STCUSER	STC	1	OUTPUT	20
HV15P00	26599		STCUSER	STC	1	OUTPUT	CC 0
HV15P00	26332		STCUSER	STC	1	OUTPUT	CC 0
HV15P00	25915		STCUSER	STC	1	OUTPUT	CC 0
HV15P00	25922		STCUSER	STC	1	OUTPUT	CC 0
HV15P00	25776		STCUSER	STC	1	OUTPUT	CC 4
HV15P00	25652		STCUSER	STC	1	OUTPUT	CC 0
HV15STRT	25606		STCUSER	A	1	OUTPUT	CC 16
HV15JOB	22185		RIHRXP	A	1	OUTPUT	CC 0
HV15JOB	22182		RIHRXP	A	1	OUTPUT	CC 0
HV15JIMA	28532	SYSP	STCUSER	STC	15	XEQ	14
HV15ADV	28530	SYSP	STCUSER	STC	15	XEQ	14
HV15	28528	SYSP	STCUSER	STC	15	XEQ	14

JES Viewer to review Xref SYSOUT

Welcome IMS Jobs Data Sets Catalog Manager

Jobs

- sysp:9910
 - BYJOBNAME: HV15*

Job Name: HV15JOB Job Id: 28589  Status: CC 0

ID	DD Name	Records	Data Set Name	Createdf
2	JESMSGLG	19	DAW4.HV15JOB.JOB28589.D0000002.JESMSGLG	03/11/2018 16:07:21
3	JESJCL	53	DAW4.HV15JOB.JOB28589.D0000003.JESJCL	03/11/2018 16:07:21
4	JESYSMSG	141	DAW4.HV15JOB.JOB28589.D0000004.JESYSMSG	03/11/2018 16:07:21
102	DBIPRINT	357	DAW4.HV15JOB.JOB28589.D0000102.?	03/11/2018 16:07:22



JES Viewer to review Xref SYSOUT

DAW4.HV15JOB.JOB28589.D0000102.?

Find Print Print Preview Cancel Change Font Help

```
+-----+
| P S B L I B   X R E F |
+-----+
```

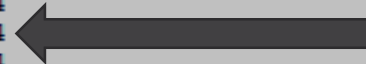
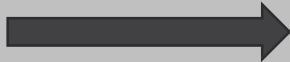
DATE=2018.070 3/11/2018 TIME=16:07

PSBLIB = IMS.V1510.PSBLIB

```
+-----+
| PSBLIB XREF - DBD TO PSB |
+-----+
```

PSB(S) REFERENCING THIS DATABASE.....

DBDNAME	COUNT	PSBNAME	PCB #	IN- TENT	SEN SEG	PSBNAME	PCB #	IN- TENT	SEN SEG
CUSTHDAM	34	EFHPSBM1	2	READ	4	EFHPSBM1	5	READ	4
		EFHPSBM1	8	READ	4	EFHPSBM1	11	READ	4
		EFHPSBM1	14	READ	4	EFHPSBM1	17	READ	4
		EFHPSBM1	20	READ	4	EFHPSBM1	23	READ	4
		EFHPSBM1	26	READ	4	EFHPSBM1	29	READ	4
		EFHPSBM1	32	READ	4	GBGPSBB1	4	UPDT	4
		GBGPSBB1	11	READ	4	GBGPSBB2	2	UPDT	4
		GBGPSBB2	10	UPDT	4	GBGPSBB3	2	UPDT	4
		HDAMLOAD	1	LOAD	4	IMSPIO0	1	UPDT	4
		JFMPsBB1	1	UPDT	4	PHDAMINQ	1	UPDT	4
		PHDAMINX	1	UPDT	4	PHDAMINY	1	UPDT	4
		PHDAMMSC	1	UPDT	4	PHDAMUPD	1	UPDT	4
		PMSG1	2	UPDT	4	PMSG1V	2	UPDT	4
		PMSG2	1	UPDT	4	PTEST01	2	UPDT	4
		PTEST01	9	READ	4	PTEST02	2	UPDT	4
		PTEST02	10	UPDT	4	RSDPSBB1	1	UPDT	4
		RSDPSBF1	1	UPDT	4	RSDPSBM2	1	UPDT	4



PTEST01 PSB ACBGEN Timestamp

- Welcome
 - IMS
 - Jobs
 - Data Sets
 - Catalog Manager
- Catalog Viewer X IMS Commands New Tab Generate JCL
- Catalog Manager for IMS
- XDFLD
 - XDFLDRMK
 - MAP
 - MAPRMK
 - CASE
 - CASERMK
 - CFLD
 - CFLDRMK
 - CMAR
 - CMARRMK
 - CPROP
 - DBDVEND
 - DBDSXXX
 - DBDPXXX
 - DBDRES1
 - DBDRES2
 - DBDHXXX
 - PSB**
 - PSBRMK
 - PCB
 - PCBRMK
 - SS
 - SSRMK
 - SF
 - SFRMK

Welcome PSB X

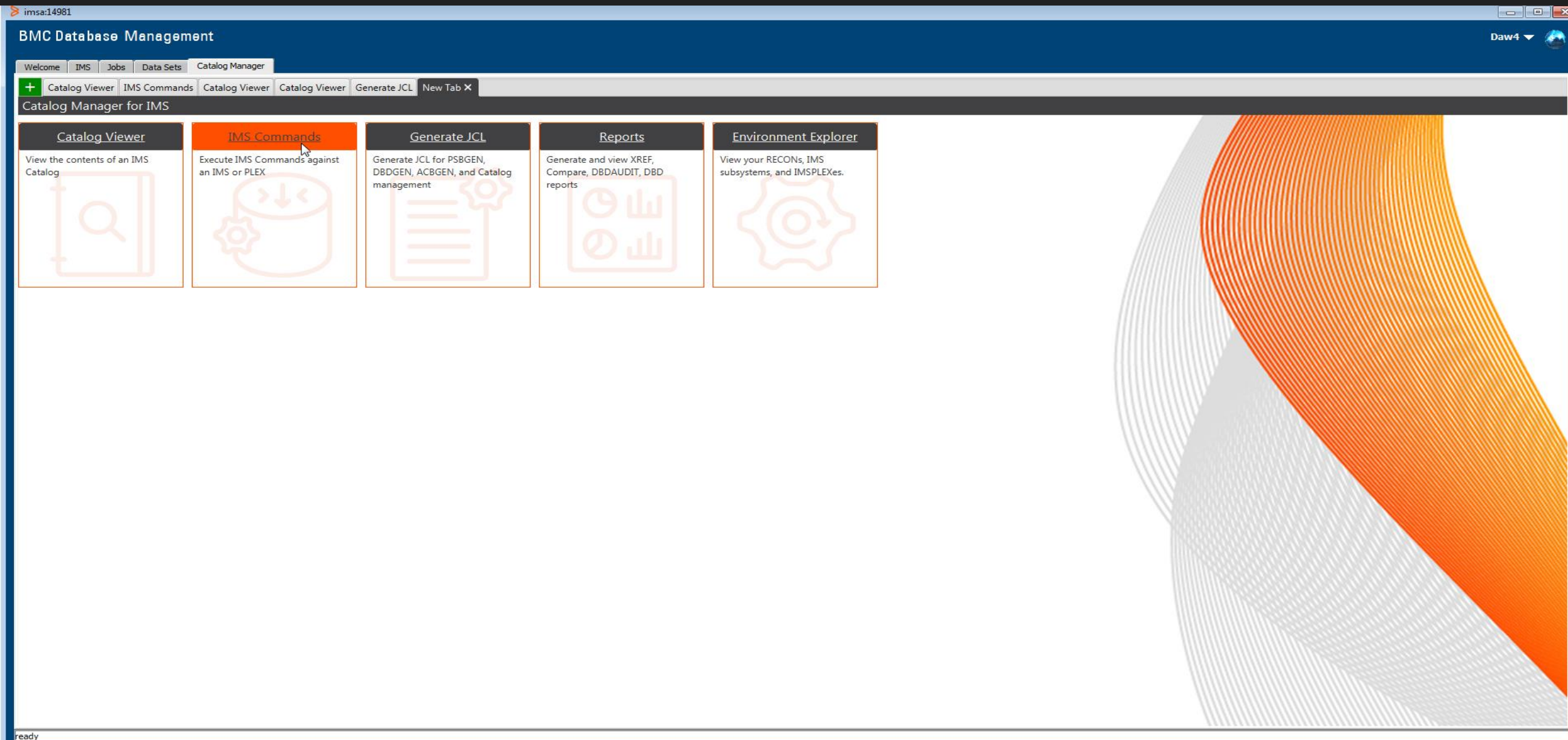
TSVERS

HEADER_RHD...	LEN	CTL	S...	C...	PSBSEQ	L...	LANG	L...	IO...	...	L...	C...	...	G...	...	F...	CRE...	F...
PSB	PTEST01	88	PS	1	0	0x00000000F1F7F2F3F2F0F7F3F	2017-08-20 07:37:56.19	0	ASSEM	0	0	0	N	Y	N			

Segment path: Q159\DFSCP000\DFSCAT00\PSB rows: 1

Severity	When	Message

Other Side of this Consistency Equation



The screenshot shows the BMC Database Management web interface. The browser address bar displays 'imsa:14981'. The application title is 'BMC Database Management'. The top navigation bar includes 'Welcome', 'IMS', 'Jobs', 'Data Sets', and 'Catalog Manager'. Below this, a secondary navigation bar contains '+ Catalog Viewer', 'IMS Commands', 'Catalog Viewer', 'Catalog Viewer', 'Generate JCL', and 'New Tab X'. The main content area is titled 'Catalog Manager for IMS' and features five functional tiles:

- Catalog Viewer**: View the contents of an IMS Catalog. (Icon: magnifying glass over a book)
- IMS Commands**: Execute IMS Commands against an IMS or PLEX. (Icon: database cylinder with arrows and a gear)
- Generate JCL**: Generate JCL for PSBGEN, DBDGEN, ACBGEN, and Catalog management. (Icon: document with a gear)
- Reports**: Generate and view XREF, Compare, DBDAUDIT, DBD reports. (Icon: document with a clock and a bar chart)
- Environment Explorer**: View your RECONS, IMS subsystems, and IMSPLEXes. (Icon: gear with a circular arrow)

The 'IMS Commands' tile is highlighted with an orange background and a mouse cursor. A large, abstract graphic on the right side of the interface consists of many thin, curved lines in shades of orange and grey, creating a sense of depth and movement.

Now let's see what gets loaded into memory from the control blocks in ACBLIB

Use the IMS Command interface to snap the DBD & PSB blocks in memory

BMC Database Management

Welcome IMS Jobs Data Sets Catalog Manager

+ Catalog Viewer IMS Commands X New Tab Generate JCL Reports Reports Catalog Viewer Catalog Viewer Catalog Viewer

Catalog Manager for IMS

Command: /diagnose snap db(custhdam) show(ddir) Execute

Plex: PLX59

Route to (optional):

/DIAGNOSE SNAP DB(CUSTHDAM) SHOW(DDIR)

Response from Q159:
/DIAGNOSE SNAP STORAGE DISPLAY

Resource: DB(CUSTHDAM)

DDIR	Database Directory Block	Loc: 1BFA2C00
0000	00000000 00000000 C3E4E2E3 C8C4C1D4CUSTHDAM
0010	00000000 00001600 000E000E 0000008A
0020	00000000 00000000 03000000 00000000
0030	1BFA2CC8 00000000 00000000 C4000000	...H.....D...
0040	00000000 00000000 00000000 00000000
0050	00000000 00000000 00000000 00000000
0060	00000000 00000000 00000000 00000000
0070	00000000 00000000 2429C38 00000000
0080	00000000 00000000 00000000 00000000
0090	00000000 00000000 17232F07 37561900
00A0	00000000 00000000 00000000 00000000
00B0	00000000 00000000 00000000 00000000
00C0	00000000 00000000

18070/201116

BMC Database Management

Welcome IMS Jobs Data Sets Catalog Manager

+ Catalog Viewer IMS Commands X New Tab Generate JCL

Catalog Manager for IMS

Command: /diagnose snap pgm(pctest01) show(pdir) Execute

Plex: PLX59

Route to (optional):

/DIAGNOSE SNAP PGM(PTEST01) SHOW(PDIR)

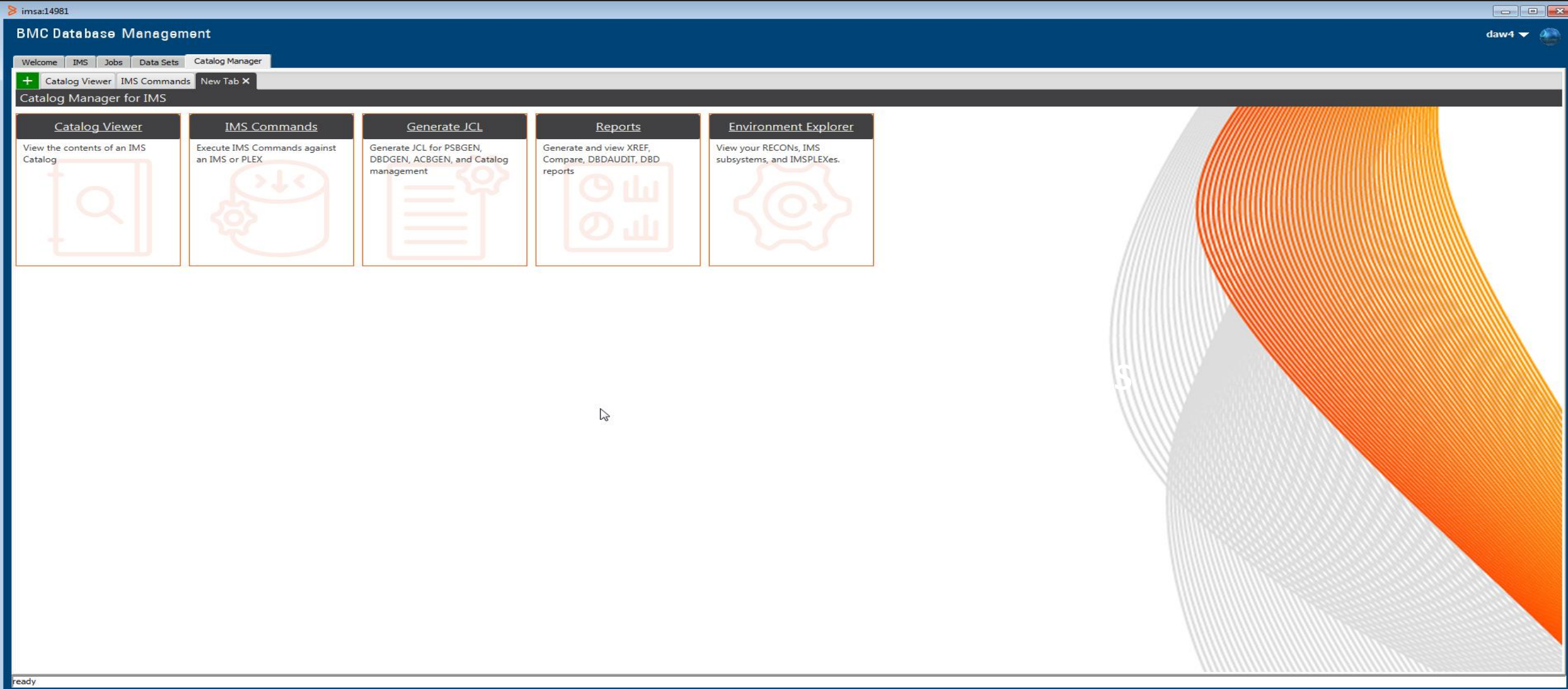
Response from Q159:
/DIAGNOSE SNAP STORAGE DISPLAY

Resource: PGM(PTEST01)

PDIR	Program Directory Block (Master)	Loc: 1BEC9850
0000	00000000 00000000 D7E3C5E2 E3F0F140PTEST01
0010	00000000 0000DA01 010C010E 0000001E
0020	40060000 1BE71B70 00000000 1BEC98C0	...X.....q...
0030	00400029 00000000 00000000 D7000000P...
0040	00000000 00000000 00000000 00000000
0050	252C4EA8 00000000 17232F07 37561900	..+y.....
0060	00000000 00000000 00000000 00000000

18071/231332

Everything is lined up!!!



The screenshot shows the BMC Database Management interface. The title bar indicates the user is logged in as 'imsa:14981'. The main window title is 'BMC Database Management'. The interface features a navigation menu with 'Welcome', 'IMS', 'Jobs', 'Data Sets', and 'Catalog Manager'. Below this, there are tabs for 'Catalog Viewer', 'IMS Commands', and 'New Tab X'. The main content area is titled 'Catalog Manager for IMS' and contains five functional tiles:

- Catalog Viewer**: View the contents of an IMS Catalog. (Icon: magnifying glass over a book)
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- Environment Explorer**: View your RECONS, IMS subsystems, and IMSPLEXes. (Icon: gear with a circular arrow)

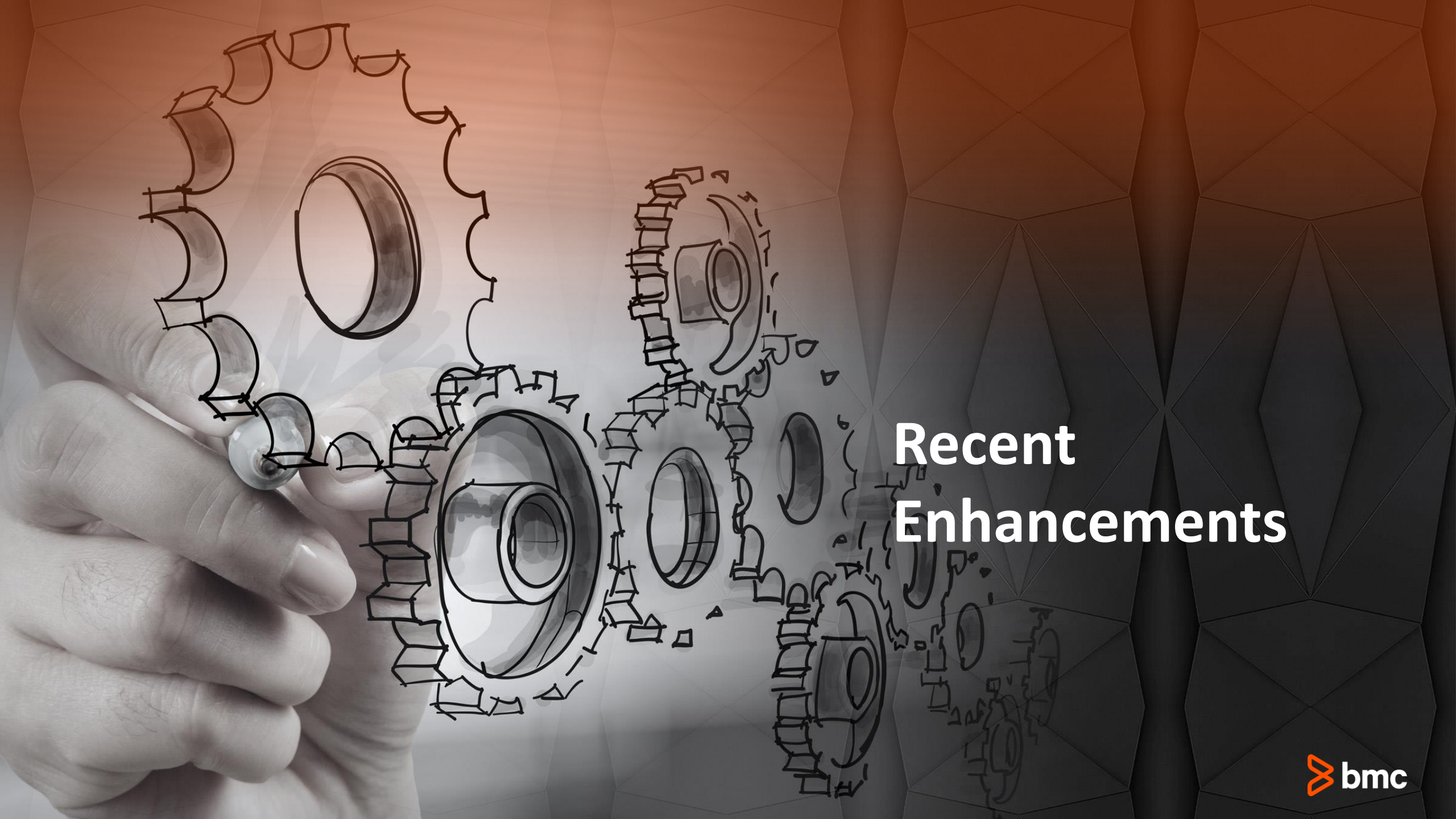
The interface is clean and organized, with a large decorative graphic on the right side consisting of overlapping curved lines in shades of orange and grey. The status bar at the bottom left shows 'ready'.

BMC Catalog Manager for IMS

- **Addresses common IMS Catalog and Directory user needs**
- **Delivered as extension of BMC DBA Toolkit**
 - Additional Catalog Manager tab in the GUI
 - Seamless integration into familiar interface
- **Activation via PTFs**
 - No additional product installation required
 - Does require current BMC IMS Solution version

BMC Catalog Manager for IMS

- No charge for existing BMC IMS tools customers
- Has the capabilities you need to manage the IMS Catalog
- Integrated into existing Database Management GUI
 - IMS Console GUI leverages best database management practices
- Extensive reporting capabilities



Recent Enhancements

Catalog Manager – Recent Enhancements

- Customer driven
- Continuous delivery
- Useability enhancements
- Security enhancements
- New functionality

Usability Enhancements

- “Enter” key can now be used to initiate or cancel a search
- Long running searches can be aborted
- Search criteria can be saved (CSV file), modified and reused
- Generic search in Catalog Viewer using wild card character (“*”)
- Results table automatically adjusted to heading width
- Progress indicator when loading data
- Ability to sort segments under DFSCAT00

Security Enhancement

- **RACF Facility Class support added to limit access**
 - **CATVIEW** – Catalog viewer access
 - **IMSCMD** – IMS command execution permission
 - **SPUFI** – SPUFI execution

Rule Name	Resource	
SDBA_CATMAN_ICM	BBM.SDBA.CATMAN.&IMSID.CATVIEW BBM.SDBA.CATMAN.&IMSID.IMSCMD BBM.SDBA.CATMAN.&IMSID.SPUFI	Access

New Functionality

- SPUFI processing
 - Ability to save previous entries
- Disassembly of PSB and DBD objects to create DDL or DBDGEN/PSBGEN syntax
 - Batch execution
 - DECODE command
 - Source from PSBLIB, DBDLIB, ACBLIB, IMS Catalog, IMS Directory

**THANK
YOU**

We want your feedback!

- Please submit your feedback online at
 - <http://conferences.gse.org.uk/2018/feedback/HF>
- Paper feedback forms are also available from the Chair person
- This session is **HF**



Tuesday 6th November

Start Time	End Time	Stream	Room	Title	Speaker
11:45	12:45	IMS	Wellington B	The No Cost Way to Manage the IMS Catalog	David Schipper
15:00	16:00	IMS	Wellington B	Current Trends in IMS Analytics	David Schipper
16:30	17:30	zCMPA	Woodcote	zIIP stealing GCP MSUs time for Capacity Management	Donald Zeunert

Wednesday 7th November

Start Time	End Time	Stream	Room	Title	Speaker
09:30	10:30	Db2	Nurburgring	Know your onions when it comes to Db2 indexes	Randy Bright
09:30	10:30	IMS	Wellington B	IMS Checkpoint Pacing	David Schipper
10:45	11:45	zCMPA	Nurburgring	How many GCP MSU is my CF stealing?	Donald Zeunert

