

Information On Demand

## One View, One Command – Simplify IMS

Janet LeBlanc  
Silicon Valley Lab  
[leblancj@ca.ibm.com](mailto:leblancj@ca.ibm.com)



**ON** DEMAND BUSINESS™

# Agenda

- - Objectives of this call
- - Product overview
- - Problem scenarios

## How do you manage IMS in a sysplex environment?

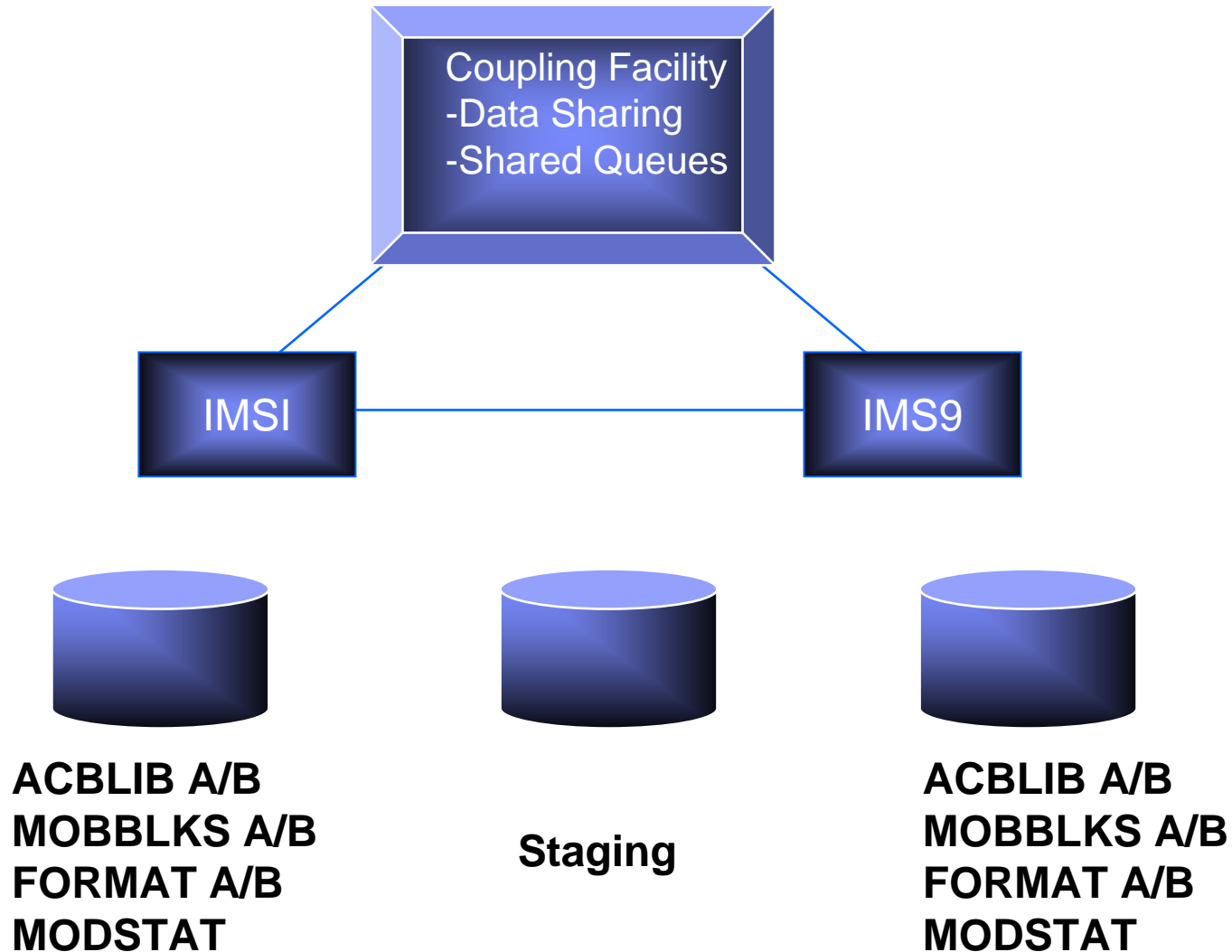
- Can you ensure synchronization of online change and database commands across all IMS regions in your sysplex?
- How do you guarantee that these commands executed successfully?
- Does your IMS Command Batch Processor do both batch and ISPF?
- Can you process commands to DB/CTL, DC/CTL or DB/DC regions?
- Would you like to limit the number of places you have to search for IMS problems?

**Command Control Facility version 2.1 can help provide the solutions you need**

# Command Control Facility Highlights

- Synchronizes Online Change and database commands across all regions
- Ensures successful processing of database START, STOP, DBR and DBD commands
- Executes IMS commands from a batch utility, TSO via an ISPF interface, or from a Callable Application Programming Interface (API)
- Issues commands for DB/CTL, DC/CTL or DB/DC regions
- Keeps members of an IMSplex synchronized by storing commands that failed due the unavailability of an IMS, and issuing the stored commands at IMS startup
- Provides view of combined messages from different IMS tasks using an ISPF interface
- Provides view of combined messages from IMS systems running in different z/OS systems

# Sample IMSplex Configuration



## Synchronization of resources in an IMSplex

It is important that all members of an IMSplex use the same resource definitions for:

- ACBLIB
- MODBLKS
- FORMAT

## /CCFMOD processing

Commands are executed one at a time to each member of the IMSplex

There are four phases to the CCF online change procedure:

- 1 - /DIS MODIFY ALL
- 2 - /MOD PREPARE *type*
- 3 - /DIS MODIFY ALL (1)
- 4 - /MOD COMMIT

EDIT P390.IZT.CNTL(BATCH) - 01.99 Columns 00001 00072

Command ==> Scroll ==> CSR

\*\*\*\*\* Top of Data \*\*\*\*\*

```

000001 //P390ABC1 JOB (TECH), 'CCFCMD00', CLASS=A, MSGCLASS=H,
000002 // REGION=4M, COND=(0, NE), NOTIFY=&SYSUID
000003 //*
000004 //STEP01 EXEC PGM=CCFCMD00, PARM='GROUP=GRPI9'
000005 //*
000006 //STEPLIB DD DISP=SHR, DSN=CCF210.SCCFLOAD
000007 // DD DISP=SHR, DSN=IMS910.SDFSRESL
000008 //SYSABEND DD SYSOUT=*
000009 //CCFLIST DD SYSOUT=*
000010 //CCFSYSIN DD *
000011 /CCFMOD ACBLIB

```

\*\*\*\*\* Bottom of Data \*\*\*\*\*



Display Filter View Print Options Help

SF OUTPUT DISPLAY P390ABC1 JOB09999 DSID 103 LINE 0 COLUMNS 02- 81  
COMMAND INPUT ==> CSR

\*\*\*\*\* TOP OF DATA \*\*\*\*\*

06010I JOB=P390ABC1 MASK=-GLOBAL- GROUP=GRPI9  
06010I IMS LIST:  
IMSI - APPC=Y  
IMS9 - APPC=Y

060150I - FOLLOWING RECORD READ FROM: CCFSYSIN  
CFMOD ACBLIB

060329I - COMMAND EXECUTING ON: IMSI  
S MODIFY ALL

- LIBRARY IMSACBA (A) IMS910.ACBLIBA
- LIBRARY FORMATA (A) IMS910.FORMATA
- LIBRARY MODBLKSA (I) IMS910.MODBLKSA
- LIBRARY MATRIXA (I) IMS910.MATRIXA
- LIBRARY IMSACBB (I) IMS910.ACBLIBB
- LIBRARY FORMATB (I) IMS910.FORMATB
- LIBRARY MODBLKSB (A) IMS910.MODBLKSB
- LIBRARY MATRIXB (A) IMS910.MATRIXB

1:z236 04,21 00:00.016 05:08 SCOTCP27

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Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB09997 DSID 104 LINE 22 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

CCF0329I - COMMAND EXECUTING ON: IMS9

/DIS MODIFY ALL

- LIBRARY IMSACBA (A) IMS910.ACBLIBA
- LIBRARY FORMATA (A) IMS910.FORMATA
- LIBRARY MODBLKSA (A) IMS910.MODBLKSA
- LIBRARY MATRIXA (A) IMS910.MATRIXA
- LIBRARY IMSACBB (I) IMS910.ACBLIBB
- LIBRARY FORMATB (I) IMS910.FORMATB
- LIBRARY MODBLKSB (I) IMS910.MODBLKSB
- LIBRARY MATRIXB (I) IMS910.MATRIXB

DISPLAY MODIFY COMPLETE \*06241/045549\*

CCF0329I - COMMAND EXECUTING ON: IMSI

/MOD PREPARE ACBLIB

DFS3499I ACTIVE DDNAMES: MODBLKSB IMSACBA FORMATA MODSTAT ID: 13

CCF0329I - COMMAND EXECUTING ON: IMS9

/MOD PREPARE ACBLIB

DFS3499I ACTIVE DDNAMES: MODBLKSA IMSACBA FORMATA MODSTAT ID: 18

10

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Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB09997 DSID 104 LINE 42 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

CCF0329I - COMMAND EXECUTING ON: IMSI

/DIS MODIFY ALL

- LIBRARY IMSACBA (A) IMS910.ACBLIBA
  - LIBRARY FORMATA (A) IMS910.FORMATA
  - LIBRARY MODBLKSA (I) IMS910.MODBLKSA
  - LIBRARY MATRIXA (I) IMS910.MATRIXA
  - LIBRARY IMSACBB (I) IMS910.ACBLIBB
  - LIBRARY FORMATB (I) IMS910.FORMATB
  - LIBRARY MODBLKSB (A) IMS910.MODBLKSB
  - LIBRARY MATRIXB (A) IMS910.MATRIXB
- NO WORK PENDING \*06241/045550\*

CCF0329I - COMMAND EXECUTING ON: IMS9

/DIS MODIFY ALL

- LIBRARY IMSACBA (A) IMS910.ACBLIBA
- LIBRARY FORMATA (A) IMS910.FORMATA
- LIBRARY MODBLKSA (A) IMS910.MODBLKSA
- LIBRARY MATRIXA (A) IMS910.MATRIXA
- LIBRARY IMSACBB (I) IMS910.ACBLIBB
- LIBRARY FORMATB (I) IMS910.FORMATB

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Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB09997 DSID 104 LINE 62 COLUMNS 02- 81

COMMAND INPUT ==> SCROLL ==> CSR

LIBRARY MODBLKSB (I) IMS910.MODBLKSB
LIBRARY MATRIXB (I) IMS910.MATRIXB
NO WORK PENDING \*06241/045550\*

CCF0329I - COMMAND EXECUTING ON: IMSI
/MOD COMMIT

DFS3499I ACTIVE DDNAMES: MODBLKSB IMSACBB FORMATA MODSTAT ID: 14

CCF0329I - COMMAND EXECUTING ON: IMS9
/MOD COMMIT

DFS3499I ACTIVE DDNAMES: MODBLKSA IMSACBB FORMATA MODSTAT ID: 19

CCF0340I - ONLINE CHANGE FUNCTION SUCCESSFUL

\*\*\*\*\* BOTTOM OF DATA \*\*\*\*\*

# Errors during Online Change

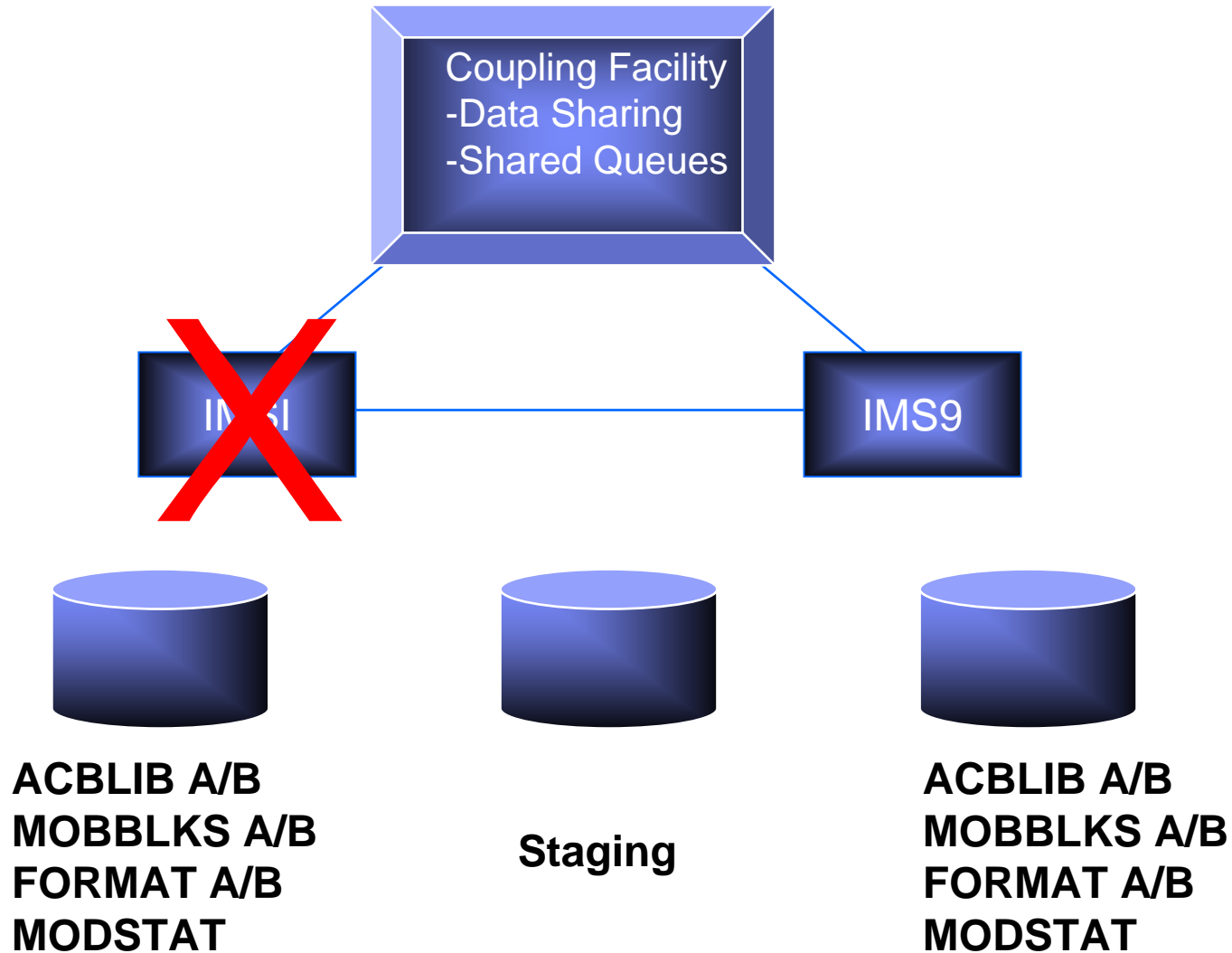
Events that prevent Online Change from completing

- IMS system unavailable
- Work in progress (i.e. active conversation, BMP using a database that is changing, etc.)

Command Control Facility assists Online Change by:

- Not allowing Online Change to proceed unless all members of the IMSplex are available
- Provides a KILLCONV parameter to discard any conversations that are preventing a successful Online Change

# Sample IMSplex Configuration



Display Filter View Print Options Help

-----  
SDSF OUTPUT DISPLAY P390ABC1 JOB00016 DSID 104 LINE 0 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

\*\*\*\*\* TOP OF DATA \*\*\*\*\*

CCF6010I JOB=P390ABC1 MASK=-GLOBAL- GROUP=GRPI9

CCF6010I IMS LIST:

IMSI - APPC=Y

IMS9 - APPC=Y

CCF0150I - FOLLOWING RECORD READ FROM: CCFSYSIN  
/CCFMOD ACBLIB

CCF0329I - COMMAND EXECUTING ON: IMSI  
/DIS MODIFY ALL

CCF0393E - INVALID RETURN CODE ON ATBRCW, RC=0000000A

CCF0350E - SERVICE ATBRCW RETURN CODE: 00000064 REASON CODE: 00000000

ATB80100I From VTAM macro APPCCMD: Primary error return code: 0004, secondary error return code: 0009, sense code: 084C0000.

z/OS

ATB70027I APPC/MVS cannot schedule allocate request. LU IMSIPPC is not in active state.

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Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB00016 DSID 104 LINE 20 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

CCF0389I - SYMDEST=IMSI / PARTNER=

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DIS MODIFY ALL

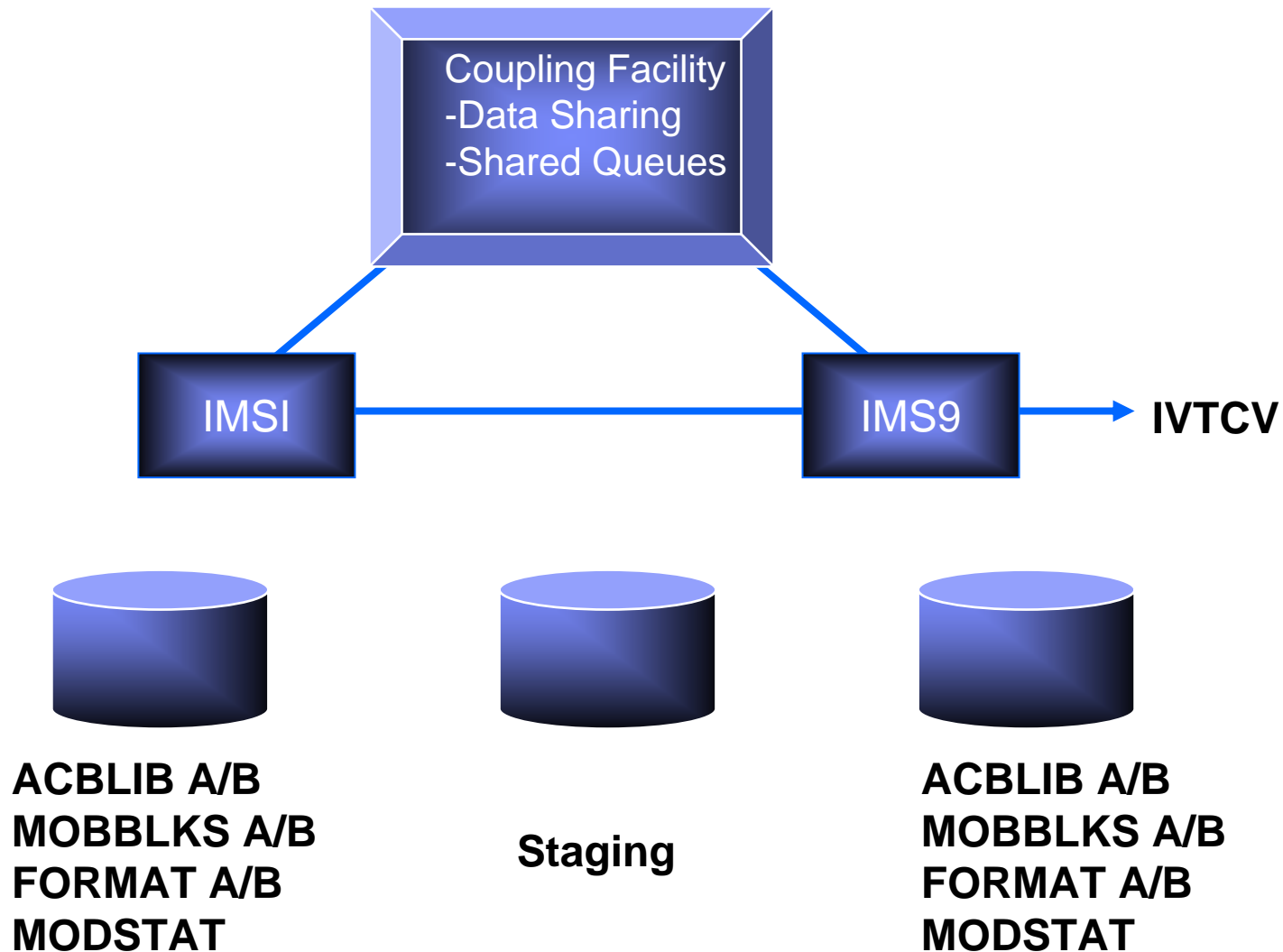
LIBRARY	IMSACBA	(A)	IMS910.ACBLIBA
LIBRARY	FORMATA	(A)	IMS910.FORMATA
LIBRARY	MODBLKSA	(A)	IMS910.MODBLKSA
LIBRARY	MATRIXA	(A)	IMS910.MATRIXA
LIBRARY	IMSACBB	(I)	IMS910.ACBLIBB
LIBRARY	FORMATB	(I)	IMS910.FORMATB
LIBRARY	MODBLKSB	(I)	IMS910.MODBLKSB
LIBRARY	MATRIXB	(I)	IMS910.MATRIXB

DISPLAY MODIFY COMPLETE \*06241/055954\*

CCF0330E - ERROR IN ONLINE CHANGE INITIALIZATION, FUNCTION TERMINATING  
\*\*\*\*\* BOTTOM OF DATA \*\*\*\*\*



# Sample IMSplex Configuration



Display Filter View Print Options Help

-----  
SDSF OUTPUT DISPLAY P390ABC1 JOB00018 DSID 104 LINE 54 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

CCF0329I - COMMAND EXECUTING ON: IMS9

/DIS MODIFY ALL

LIBRARY IMSACBA (A) IMS910.ACBLIBA

LIBRARY FORMATA (A) IMS910.FORMATA

LIBRARY MODBLKSA (A) IMS910.MODBLKSA

LIBRARY MATRIXA (A) IMS910.MATRIXA

LIBRARY IMSACBB (I) IMS910.ACBLIBB

LIBRARY FORMATB (I) IMS910.FORMATB

LIBRARY MODBLKSB (I) IMS910.MODBLKSB

LIBRARY MATRIXB (I) IMS910.MATRIXB

TRAN IVTCV CONVERSATION TERM/USER SCOTCP28 LTRM1 ID= 0001

DISPLAY MODIFY COMPLETE \*06241/060400\*

CCF0332E - AN ERROR HAS BEEN ENCOUNTERED, ONLINE CHANGE TERMINATING

CCF0334I - MODIFY ABORT PROCESSING INITIATED

CCF0329I - COMMAND EXECUTING ON: IMSI

/MOD ABORT

18 058I 06:04:00 MODIFY COMMAND COMPLETED

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04,21 00:00.016 06:04 SCOTCP27

```

EDIT          P390.IZT.CNTL(BATCH) - 01.99          Columns 00001 00072
Command ==>                                         Scroll ==> CSR
***** Top of Data *****
000001 //P390ABC1 JOB (TECH), 'CCFCMD00',CLASS=A,MSGCLASS=H,
000002 //          REGION=4M,COND=(0,NE),NOTIFY=&SYSUID
000003 //*
000004 //STEP01 EXEC PGM=CCFCMD00,PARM='GROUP=GRPI9'
000005 //*
000006 //STEPLIB DD DISP=SHR,DSN=CCF210.SCCFLOAD
000007 //          DD DISP=SHR,DSN=IMS910.SDFSRESL
000008 //SYSABEND DD SYSOUT=*
000009 //CCFLIST DD SYSOUT=*
000010 //CCFSYSIN DD *
000011 /CCFMOD ACBLIB KILLCONV
***** Bottom of Data *****

```

Display Filter View Print Options Help

-----  
SDSF OUTPUT DISPLAY P390ABC1 JOB00019 DSID 104 LINE 55 COLUMNS 02- 81  
COMMAND INPUT ==> \_ SCROLL ==> CSR

/DIS MODIFY ALL

```

LIBRARY IMSACBA (A) IMS910.ACBLIBA
LIBRARY FORMATA (A) IMS910.FORMATA
LIBRARY MODBLKSA (A) IMS910.MODBLKSA
LIBRARY MATRIXA (A) IMS910.MATRIXA
LIBRARY IMSACBB (I) IMS910.ACBLIBB
LIBRARY FORMATB (I) IMS910.FORMATB
LIBRARY MODBLKSB (I) IMS910.MODBLKSB
LIBRARY MATRIXB (I) IMS910.MATRIXB
TRAN IVTCV CONVERSATION TERM/USER SCOTCP28 LTRM1 ID= 0001
DISPLAY MODIFY COMPLETE *06241/060643*
    
```

CCF0329I - COMMAND EXECUTING ON: IMS9  
/STO USER LTRM1  
DFS058I 06:06:44 STOP COMMAND COMPLETED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/STA USER LTRM1  
DFS058I 06:06:44 START COMMAND COMPLETED

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04,21 00:00.031 06:06 SCOTCP27

Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB00019 DSID 104 LINE 75 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

CCF0329I - COMMAND EXECUTING ON: IMS9

/DIS MODIFY ALL

- LIBRARY IMSACBA (A) IMS910.ACBLIBA
- LIBRARY FORMATA (A) IMS910.FORMATA
- LIBRARY MODBLKSA (A) IMS910.MODBLKSA
- LIBRARY MATRIXA (A) IMS910.MATRIXA
- LIBRARY IMSACBB (I) IMS910.ACBLIBB
- LIBRARY FORMATB (I) IMS910.FORMATB
- LIBRARY MODBLKSB (I) IMS910.MODBLKSB
- LIBRARY MATRIXB (I) IMS910.MATRIXB

NO WORK PENDING \*06241/060644\*

CCF0329I - COMMAND EXECUTING ON: IMSI

/MOD COMMIT

DFS3499I ACTIVE DDNAMES: MODBLKSB IMSACBB FORMATA MODSTAT ID: 22

CCF0329I - COMMAND EXECUTING ON: IMS9

/MOD COMMIT

DFS3499I ACTIVE DDNAMES: MODBLKSA IMSACBB FORMATA MODSTAT ID: 27

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1:z236

04,21 00:00.016 06:07 SCOTCP27

# Database Command Verification

Reasons for batch job database allocation failures

- Is the database still allocated to IMS?
- Does another subsystem have the database open with update intent?

Command Control Facility response verification

- Interprets response messages to database START, STOP, DBR and DBD commands.
- Retries failed commands a user specified number of times with a user specified interval between retries.
- Check DBRC to determine if the database is open by any subsystem with update intent.

# Command Control Facility Customization

- Create Command Control Facility options data set
  - Define IMS systems
  - Define Command Control Facility IMS Groups
  - Set Global runtime options
  - Set job name specific runtime options

-

## Menu

-----  
CCF Primary Option Menu

Option ==&gt; \_\_\_\_\_

CCF VSAM Options Data Set:

Data Set Name . . . P390.CCF.OPTIONS

- 1 Global Specify Global Options
- 2 Job Specify Job Options
- 3 IMS Define IMS Systems
- 4 Group Define CCF Group
- 5 Edit STF Edit Command Store/Forward Data Set
- 6 MSG Disp Edit DFSAOE00 Message Disposition table
- 7 LOG View View Combined Message Log
  
- C CMD Issue IMS Commands
  
- X Exit Terminate Dialog



-----  
CCF Global Options

Command ==> \_\_\_\_\_ Scroll ==> CSR  
More: +

General Processing Options:

CCF Input DDNAME : CCFSYSIN  
CCF Output DDNAME: CCFLIST

APPC/STC TPname: CCF.DBCTL.BMP

Command Retry Options:

Attempts ..... 02  
Interval (Sec) .... 002

Abend/RC Failure Settings:

Abend Code .... 4094  
Return Code ... 0012

Failure Options:

General:

2 1 ABEND  
2 Return Code  
3 Issue WTOR  
4 Ignore

Routing:

2 1 ABEND  
2 Return Code  
3 Issue WTOR  
4 Ignore

DFS0488I:

2 1 ABEND  
2 Return Code  
3 Issue WTOR  
4 Ignore

DBRC:

2 1 ABEND  
2 Return Code  
3 Issue WTOR  
4 NODBRC

To save the changes, press ENTER  
ignore the changes, enter END

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-----  
CCF Global Options

Command ==> \_\_\_\_\_ Scroll ==> CSR

4 Ignore                      4 Ignore                      4 Ignore                      More:    - +  
4 NODBRC

/CCFMODE Options:

/CCFMODE Failures:

1 1 ABEND  
2 Return Code

/CCFMODE COMMIT Reversal? (Y/N) ...: N

Database Options:

Valid DFS0488I Return Codes:

01 02 03 04 05 00 00 00 00 00 00 00 00 00 00 00 00 00 00

Valid IMS OM Return Codes:

To save the changes, press ENTER  
ignore the changes, enter END

26

1:z236

04,15 00:00.016 09:56 SCOTCP30

-----  
CCF Global Options

Command ==> \_\_\_\_\_ Scroll ==> CSR  
More: -

01 02 03 04 05 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

Valid IMS OM Return Codes:

30 40 50 \_\_\_\_\_

/START DB ACCESS

- 1 1 Use SYSGEN
- 2 Use DBRC
- 3 As coded

WTO Database command? .....: N (Y/N)  
 Expand DATAGRPF commands? .....: Y (Y/N)  
 Treat DFS3466I as an error? .....: N (Y/N)  
 Add NOFEVD to /DBD and /DBR? .....: Y (Y/N)  
 Use DB pre-scan for remote STC? ..: Y (Y/N)

To save the changes, press ENTER  
27 ignore the changes, enter END

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-----  
CCF IMS System Information

Command ==> \_\_\_\_\_ Scroll ==> CSR

IMSID ..... IMS9

Command Routing Technique:

<u>1</u>	1 - APPC/IMS	- SYMDEST: <u>IMS9</u>	PLU: _____	MODE: _____
	2 - APPC/MVS	- SYMDEST: _____	PLU: _____	MODE: _____
	3 - IMS OM	- Plex:... <u>IMS9X</u>		

Default CCF Group .... \_\_\_\_\_

IMS System Information:

DFSVNUC Suffix ..... 9  
 MODBLKS DSNAME ..... IMS910.MODBLKS  
 Release ..... 0910

DFSAOE00 Information:

CCF Logger Name ..... @CCF.LOGGER  
 User DFSAOE00 Name .... DFSAOE01  
 Msg Disp Table Name ... PROD

-----  
CCF Group IMSID List

Command ==> \_\_\_\_\_ Scroll ==> CSR

CCF Group ..... GRPI9  
Shared RECONS (Y/N) .... Y

IMS  
----

More: +

- 1. IMSI
- 2. IMS9
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_
- 11. \_\_\_\_\_
- 12. \_\_\_\_\_

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1:z236

04,15 00:00.266 10:00 SCOTCP30

EDIT P390.IZT.CNTL(BATCH1) - 01.00 Columns 00001 00072

Command ==> Scroll ==> CSR

\*\*\*\*\* Top of Data \*\*\*\*\*

```
000001 //P390ABC1 JOB (TECH), 'CCFCMD00', CLASS=A, MSGCLASS=H,  
000002 // REGION=4M, COND=(0, NE), NOTIFY=&SYSUID  
000003 //*  
000004 //STEP01 EXEC PGM=CCFCMD00, PARM='GROUP=GRPI9'  
000005 //*  
000006 //STEPLIB DD DISP=SHR, DSN=CCF210.SCCFLOAD  
000007 // DD DISP=SHR, DSN=IMS910.SDFSRESL  
000008 //SYSABEND DD SYSOUT=*  
000009 //CCFLIST DD SYSOUT=*  
000010 //CCFSYSIN DD *  
000011 /DBR DB DBIZT1
```

\*\*\*\*\* Bottom of Data \*\*\*\*\*

Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB00028 DSID 104 LINE 0 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

\*\*\*\*\* TOP OF DATA \*\*\*\*\*

CCF6010I JOB=P390ABC1 MASK=-GLOBAL- GROUP=GRPI9

CCF6010I IMS LIST:

IMSI - APPC=Y

IMS9 - APPC=Y

CCF0150I - FOLLOWING RECORD READ FROM: CCFSYSIN  
/DBR DB DBIZT1

CCF0329I - COMMAND EXECUTING ON: IMSI  
/DBR DB DBIZT1

DFS0488I DBR COMMAND COMPLETED. DBN= DBIZT1 RC= 0

DFS058I 06:47:17 DBRECOVERY COMMAND COMPLETED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DBR DB DBIZT1

DFS0565I /DBR COMMAND NOT PROCESSED DB=DBIZT1 IN USE BY PSB=IZTRAN REG=0000

2

31 058I 06:47:18 DBRECOVERY COMMAND COMPLETED

1:z236

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Display Filter View Print Options Help

SDSF OUTPUT DISPLAY P390ABC1 JOB00028 DSID 104 LINE 20 COLUMNS 02- 81  
COMMAND INPUT ==> \_ SCROLL ==> CSR

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DBR DB DBIZT1  
DFS0565I /DBR COMMAND NOT PROCESSED DB=DBIZT1 IN USE BY PSB=IZTRAN REG=0000  
2  
DFS058I 06:47:20 DBRECOVERY COMMAND COMPLETED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DBR DB DBIZT1  
DFS0565I /DBR COMMAND NOT PROCESSED DB=DBIZT1 IN USE BY PSB=IZTRAN REG=0000  
2  
DFS058I 06:47:23 DBRECOVERY COMMAND COMPLETED

CCF0357E - REGION TERMINATING, MAXIMUM RETRY ATTEMPTS EXCEEDED  
\*\*\*\*\* BOTTOM OF DATA \*\*\*\*\*



Display Filter View Print Options Help

-----  
SDSF OUTPUT DISPLAY P390ABC1 JOB00044 DSID 104 LINE 0 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> CSR

\*\*\*\*\* TOP OF DATA \*\*\*\*\*

CCF6010I JOB=P390ABC1 MASK=-GLOBAL- GROUP=GRPI9

CCF6010I IMS LIST:

IMSI - APPC=Y

IMS9 - APPC=Y

CCF0150I - FOLLOWING RECORD READ FROM: CCFSYSIN  
/DBR DB DBIZT1

CCF0329I - COMMAND EXECUTING ON: IMSI  
/DBR DB DBIZT1

DFS0488I DBR COMMAND COMPLETED. DBN= DBIZT1 RC= 0

DFS058I 07:21:05 DBRECOVERY COMMAND COMPLETED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DBR DB DBIZT1

DFS0488I DBR COMMAND COMPLETED. DBN= DBIZT1 RC= 0

DFS058I 07:21:06 DBRECOVERY COMMAND COMPLETED

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Display Filter View Print Options Help

-----  
SDSF OUTPUT DISPLAY P390ABC1 JOB00044 DSID 104 LINE 20 COLUMNS 02- 81

COMMAND INPUT ==> SCROLL ==> CSR

CCF0374I - NO DATABASES OPEN WITH UPDATE INTENT

CCF0375I - DBRC VALIDATION SUCCESSFUL

\*\*\*\*\* BOTTOM OF DATA \*\*\*\*\*

# Managing your IMS systems

## Interactive operations of an IMSplex

- How do you display/update resources in multiple IMS regions
- How do you display/update resources in IMS regions in a different z/OS sysplex
- Do you execute multiple commands to perform a single task?

## Command Control ISPF interface

- Execute commands to a specific IMS on any z/OS image
- Execute commands to a group of IMS systems on any z/OS image(s)
- Issue a single CCF command to perform a list of IMS command

## Menu

-----  
CCF Primary Option Menu

Option ==&gt; \_\_\_\_\_

CCF VSAM Options Data Set:

Data Set Name . . . P390.CCF.OPTIONS

- 1 Global Specify Global Options
- 2 Job Specify Job Options
- 3 IMS Define IMS Systems
- 4 Group Define CCF Group
- 5 Edit STF Edit Command Store/Forward Data Set
- 6 MSG Disp Edit DFSAOE00 Message Disposition table
- 7 LOG View View Combined Message Log
  
- C CMD Issue IMS Commands
  
- X Exit Terminate Dialog

-----  
CCF IMS Command Panel

Option ==> \_\_\_\_\_ Scroll ==> CSR

IMSID/GROUP: IMSI  
Command ==> /DIS PROG I\*

\*\*\*\*\* Top of Data \*\*\*\*\*

CCF0329I - COMMAND EXECUTING ON: IMSI

/DIS PROG ALL

PROGRAM	TRAN	TYPE
IVPREXX	IVPREXX	TP
IZTRAN	IZTRAN	TP
IZTUD1U0		BMP
*06241/075613*		

\*\*\*\*\* Bottom of Data \*\*\*\*\*

-----  
CCF IMS Command Panel

Option ==> \_\_\_\_\_ Scroll ==> CSR

IMSID/GROUP: GRPI9  
Command ==> /DIS Q TRAN

\*\*\*\*\* Top of Data \*\*\*\*\*

CCF0329I - COMMAND EXECUTING ON: IMSI  
/DIS Q TRAN

CLS        PTY        MSG CT TRAN        PSBNAME  
\*NO QUEUES\*  
\*06241/075654\*

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DIS Q TRAN

CLS        PTY        MSG CT TRAN        PSBNAME  
\*NO QUEUES\*  
\*06241/075655\*

\*\*\*\*\* Bottom of Data \*\*\*\*\*

-----  
CCF IMS Command Panel

Option ==> \_\_\_\_\_ Scroll ==> CSR

IMSID/GROUP: GRPI9

Command ==> /DIS DB DBIZT1 DI21PART

\*\*\*\*\* Top of Data \*\*\*\*\*

CCF0329I - COMMAND EXECUTING ON: IMSI

/DIS DB DBIZT1 DI21PART

DATABASE	TYPE	TOTAL UNUSED	TOTAL UNUSED	ACC	CONDITIONS
DBIZT1	DL/I			EX	NOTOPEN, ALLOCS
DI21PART	DL/I			UP	NOTOPEN, ALLOCS

\*06241/075724\*

CCF0329I - COMMAND EXECUTING ON: IMS9

/DIS DB DBIZT1 DI21PART

DATABASE	TYPE	TOTAL UNUSED	TOTAL UNUSED	ACC	CONDITIONS
DBIZT1	DL/I			UP	NOTOPEN, ALLOCS
DI21PART	DL/I			UP	NOTOPEN, ALLOCS

\*06241/075724\*

\*\*\*\*\* Bottom of Data \*\*\*\*\*

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1:z236

07,15 00:00.547 07:57 SCOTCP27

## CCF Command List Processing

Sample command:

```
/CCFPROC mbr variable
```

*Mbr* – Member of a PDS allocated to TSO session

*Variable* – Parm will replace symbolic in PDS member *Mbr*

Sample member = DEQ

```
/STO USER &CCFUSYM1
```

```
/DEQ USER &CCFUSYM1 PURGE
```

```
/STA USER &CCFUSYM1
```

- Valid only from ISPF dialog



-----  
CCF IMS Command Panel

Option ==> \_\_\_\_\_ Scroll ==> CSR

IMSID/GROUP: IMS9  
Command ==> /CCFPROC DEQ LTRM1

\*\*\*\*\* Top of Data \*\*\*\*\*

CCF0329I - COMMAND EXECUTING ON: IMS9  
/STO USER LTRM1  
DFS058I 07:58:49 STOP COMMAND COMPLETED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/DEQ USER LTRM1 PURGE  
DFS976I 7:58:49 0 MESSAGE(S) PURGED

CCF0329I - COMMAND EXECUTING ON: IMS9  
/STA USER LTRM1  
DFS058I 07:58:49 START COMMAND COMPLETED

\*\*\*\*\* Bottom of Data \*\*\*\*\*

# IMS Problem determination

Multiple places to search for messages and commands

- Where is the message displayed?
- IMS control region z/OS log, IMS secondary master terminal, or IMS DL/I z/OS log?
- In an IMSplex, which system encountered the problem?
- What commands did a certain userid execute?

Command Control Facility message log

- IMS system messages and message destined for the IMS master are written to a z/OS log stream.
- All IMS commands and command responses that are presented to the AOI exit (DFSABOE00) are written to the same z/OS log stream.
- Multiple IMS systems can use the same log stream on a single z/OS image.
- If the log stream is defined to the Coupling Facility, multiple z/OS images can use the same log.

## Menu

-----  
CCF Primary Option Menu

Option ==&gt; \_\_\_\_\_

CCF VSAM Options Data Set:

Data Set Name . . . P390.CCF.OPTIONS

- 1 Global Specify Global Options
- 2 Job Specify Job Options
- 3 IMS Define IMS Systems
- 4 Group Define CCF Group
- 5 Edit STF Edit Command Store/Forward Data Set
- 6 MSG Disp Edit DFSAOE00 Message Disposition table
- 7 LOG View View Combined Message Log
  
- C CMD Issue IMS Commands
  
- X Exit Terminate Dialog

Row 14 to 15 of 15

CCF Log View IMS System List

Command ==> \_\_\_\_\_ Scroll ==> CSR

Specify a list action.  
Actions: S - Select

S IMS CCF Logger Name  
- -----

= IMS8 @CCF.LOGGER  
S IMS9 @CCF.LOGGER

\*\*\*\*\* Bottom of data \*\*\*\*\*

# CCF Log View Filters

Option ==>

IMSID : \_\_\_\_\_  
 OM Name : \_\_\_\_\_  
 User : \_\_\_\_\_

From date: \_\_\_\_\_ (yyyy.ddd) From time: \_\_\_\_\_ (hh:mm:ss)  
 Thru date: \_\_\_\_\_ (yyyy.ddd) Thru time: \_\_\_\_\_ (hh:mm:ss)

CCF Log View

Command ==>	Scroll ==>	CSR
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLS04
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLP03
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLS03
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLP02
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLS02
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLP01
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLS01
06241 08:25:35.05 IMS9	U=P390	EMCS DUAL OLDS LOGGI
06241 08:25:35.06 IMS9	U=P390	EMCS AUTOMATIC ARCHIV
06241 08:25:35.06 IMS9	U=P390	EMCS WADS = *DFSWADS0
06241 08:25:35.06 IMS9	U=P390	EMCS SLDSREAD ON.
06241 08:25:35.06 IMS9	U=P390	EMCS *06241/082535*.
06241 08:42:08.75 IMSI	U=P390	LU62 /STA DB DBIZT1
06241 08:42:08.76 IMSI	U=P390	LU62 .DFS058I 08:42:08 STA
06241 08:42:08.77 IMSI		DFS0488I STA COMMAND
06241 08:42:08.84 IMS9	U=P390	LU62 /STA DB DBIZT1
06241 08:42:08.86 IMS9	U=P390	LU62 .DFS058I 08:42:08 STA
06241 08:42:08.88 IMS9		DFS0488I STA COMMAND

Bottom of Data

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1:z236

05,15 00:00.016 08:42 SCOTCP27

CCF Log View

Command ==>

Scroll ==> CSR

```

DFSOLS04 AVAILABLE .
DFSOLP03 AVAILABLE .
DFSOLS03 AVAILABLE .
DFSOLP02 AVAILABLE .
DFSOLS02 AVAILABLE .
DFSOLP01 AVAILABLE .
DFSOLS01 AVAILABLE .

```

```

DUAL OLDS LOGGING, DUAL WADS LOGGING.
AUTOMATIC ARCHIVE = 01.
WADS = *DFSWADS0 *DFSWADS1 DFSWADS8 DFSWADS9.
SLDSREAD ON.
*06241/082535*.

```

STA DB DBIZT1

```

DFS058I 08:42:08 START COMMAND COMPLETED.
FS0488I STA COMMAND COMPLETED. DBN= DBIZT1 RC= 0.

```

STA DB DBIZT1

```

DFS058I 08:42:08 START COMMAND COMPLETED.
FS0488I STA COMMAND COMPLETED. DBN= DBIZT1 RC= 0.

```

\*\*\*\*\* Bottom of Data \*\*\*\*\*

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1:z236

05,15 00:00.015 08:42 SCOTCP27

### CCF Log View Filters

Option ==>

IMSID : ims9  
OM Name : \_\_\_\_\_  
User : \_\_\_\_\_

From date: \_\_\_\_\_ (yyyy.ddd) From time: \_\_\_\_\_ (hh:mm:ss)  
Thru date: \_\_\_\_\_ (yyyy.ddd) Thru time: \_\_\_\_\_ (hh:mm:ss)



CCF Log View

Command ==>	Scroll ==>	CSR
06241 08:25:35.02 IMS9	U=P390	EMCS DFSOLP05
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLS05
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLP04
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLS04
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLP03
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLS03
06241 08:25:35.03 IMS9	U=P390	EMCS DFSOLP02
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLS02
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLP01
06241 08:25:35.05 IMS9	U=P390	EMCS DFSOLS01
06241 08:25:35.05 IMS9	U=P390	EMCS . DUAL OLDS LOGGI
06241 08:25:35.06 IMS9	U=P390	EMCS AUTOMATIC ARCHIV
06241 08:25:35.06 IMS9	U=P390	EMCS WADS = *DFSWADS0
06241 08:25:35.06 IMS9	U=P390	EMCS SLDSREAD ON.
06241 08:25:35.06 IMS9	U=P390	EMCS *06241/082535*.
06241 08:42:08.84 IMS9	U=P390	LU62 /STA DB DBIZT1
06241 08:42:08.86 IMS9	U=P390	LU62 .DFS058I 08:42:08 STA
06241 08:42:08.88 IMS9		DFS0488I STA COMMAND

\*\*\*\*\* Bottom of Data \*\*\*\*\*

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1:z236

05,15 00:00.016 08:43 SCOTCP27

# Solutions



# How to get more information

- More Information on Command Control Facility

[www.ibm.com/software/data/db2imstools/imstools/imscmdcntrl.html](http://www.ibm.com/software/data/db2imstools/imstools/imscmdcntrl.html)

- More Information on IBM's DB2 and IMS Tools

[www.ibm.com/software/data/db2imstools](http://www.ibm.com/software/data/db2imstools)



*Any  
Questions?*