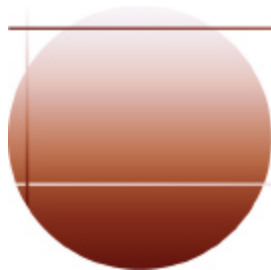


H05

IMS Database Control Suite

User Interface Prototype

Geoff Jackson and Joseph Sacco



IMS

technical conference

Las Vegas, NV

September 15 – September 18, 2003

Possibilities for the future . . .

The screenshot displays the IBM Control Center interface. On the left, a tree view shows the hierarchy of systems and groups. The 'Order' group is selected, showing a table of database and data definitions.

DB Name	DD Name
SMPORDP1	SMPORD1P
SMPORDX1	SMPORD1X
SMPORDY1	SMPORD1Y
SMPORDY2	SMPORDZY
SMPPAYP1	SMPPAY1P
SMPPAYY1	SMPPAY1Y

Overlaid on this is the 'Reorganize Wizard' dialog box, currently on the 'Review and edit the JCL built for this job' step. The JCL code is as follows:

```

000001 //ORD1RE1 JOB ,
000002 //          MSGLEVEL=(1,1),MSGCLASS=H,
000003 //          NOTIFY=&SYSUID,USER=&SYSUID,REGION=0M,TIME=30
000004 //*
000005 //*
000006 //*
000007 //* MEMBER=IDLJOBBS
000008 //*
000009 //* Job created on 2003/07/25 at 15:09:28.42 by JSACCO
000010 //*
000011 //*MEMBER=IDLICEST
000012 //*
000013 //*****
000014 //* ICE IMAGE COPY STEP
000015 //*****
000016 //ICESTEP EXEC PGM=FABJMAIN,REGION=0M,COND=(4,LT)
000017 //STEPLIB DD DISP=SHR,DSN=DETMMAIN.HPS110.SHPSLMD0.D020607
000018 //          DD DISP=SHR,DSN=IMSVS.I71RTS2A.CRESLIB
000019 //          DD DISP=SHR,DSN=JSACCO.V317.IVP.DYNLIB
000020 //          DD DISP=SHR,DSN=ICING1.IIU.IBTEST.TMUC1
000021 //DFSRESLB DD DISP=SHR,DSN=IMSVS.I71RTS2A.CRESLIB
000022 //*
000023 //*MEMBER=IDLDBDLB
000024 //*
000025 //IMS DD DISP=SHR,DSN=JSACCO.V317.IVP.DBDLIB
000026 //HISTORY DD DISP=SHR,DSN=JSACCO.HISTORY
    
```

Below the wizard, a 'Group - Order' summary panel provides details for the 'Order' group:

- Description: Order databases
- System: ias.torolab.com
- Instance: IMS
- Type: Local
- Path: D:\VMS
- Current Status: RECON : **Registered** : 10/1/2002 14:37
- Recovery: **Last Backup** : 10/2/2002 21:24 [ORD1IC1](#)
- Space Management: **Last Reorg** : 2/17/2003 18:36 [ORD1RP21](#)
- Current Size: **90 MB** (Maximum Capacity: 100MB)

Buttons for 'Backup', 'Recover', 'Reorganize', and 'RECON Maintenance' are visible. A 'Show Results' button is also present.



Possibilities for the future . . .

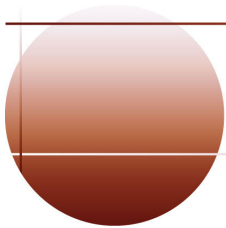
- IMS Tools functionality integrated with the IMS Control Center
- Wizards for JCL Generation with “Smart Edit”
- Job results presented as soon as they complete
- Most recent jobs saved for fast execution
- Actions recommended based on resource analysis
- And more . . . come visit us on the demo floor



H05

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Geoff Jackson
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Workshop Overview

This workshop deals with daily IMS database administration. The IMS Database Control Suite can be used to generate optimal JCL for administrative jobs, including image copies, pointer checking, index building, parallel reorganization and many more.

In this workshop you will have an opportunity to build JCL for many of the Control Suite jobs. You will also have the opportunity to use the Control Suite's interactive ISPF interface to the RECON to perform RECON maintenance.

We have 5 main exercises:

Exercise 1: Guides you through the LOGON process and accessing the IMS Database Control Suite program.

Exercise 2: IMS Base Image Copy. You will generate and submit the JCL to perform an IMS base image copy of a DBDS Group.

Exercise 3: IMS ICE Image Copy. You will update your Control Suite environment to use the IBM Image Copy Extensions tool. You will again generate and submit JCL to run an image copy.

Exercise 4: Reorganization job stream. You will quickly generate the JCL to perform a complex reorganization job using the Control Suite.

Exercise 5: RECON Maintenance: You will use the Control Suite's interactive interface to the RECON to invalidate one of the image copies you recently took.

*Note: These exercises are just an example of what you can do with the Control Suite. For those interested, there will be time after the main session to run the Set Up function of the Control Suite and explore other features further.

Exercise 1. Logon to the Control Suite

In this exercise you become familiar with the provided workstation environment and learn about the software loaded on the system and how to access the mainframe.

You will go to ISPF/PDF and to the IMS Database Control Suite.

Exercise Steps

MVS Information

Logon information: Userid=TEAMxx Password=TEAMxx

1. Enter STLMVS1 TEAMxx and then press Enter.

```

SYSID: STLCMCA          SANTA TERESA NETWORK          TERM ID: ST02TI79
      For IBM Management Approved Purposes Only          Page 1 of 8
"LOGOFF" to exit          Time: 11:53:00 09/15/03
SERVICES STATUS      I | SERVICES STATUS      I | SERVICES STATUS      I
-----|-----|-----|-----|-----|-----|-----|-----|-----|
STLVM1  Avail 22:42  I | SNJEDS1  Avail 22:42  I | LOGON      Avail 22:39
STLVM3  Avail 22:42  I | SNJEDS2  Down  22:39  I | STLVM9     Avail 22:42  I
STLVM7  Avail 22:42  I | SNJEDS3  Avail 22:42  I | STPLEX4A   Avail 22:42
STLVM8  Avail 22:42  I | SNJMAS3  Avail 22:42  I | STPLEX4B   Avail 22:42
STLVM10 Avail 22:42  I | SJMMAS1  Avail 22:42  I | STPLEX4C   Down  14:53
STLVM14 Avail 22:42  I | SJMMVS18 Avail 22:42  I | STPLEX4D   Down  22:39
STLVM20 Avail 22:42  I | SJEVM5   Avail 01:43  I | STPLEX4    Avail 22:42
STLVM22 Avail 22:42  I | SJFEVMX  Avail 22:42  I | WWCLMVM1  Avail 22:42
STLVM25 Avail 22:42  I | PVM      Avail 22:42
STLVM27 Avail 22:42  I | STLCMCA  Avail 22:39
STLVM32 Avail 22:42  I | SJCVCSC1 Avail 22:42
STLVM33 Avail 22:42  I | SNCMC1   Avail 22:42
STLMVS1 Avail 15:29  I | SNCMC4   Avail 22:42
STLMVS2 Avail 22:42  I | L        Avail 22:39
-----|-----|-----|-----|-----|-----|-----|-----|-----|

IBM TRAVELER: Enter - IBMNET nodeID - where nodeID is your Office System
For info: Enter service/I or TPNEWS          HELP DESK: 1-888-IBM-HELP
==> stlmvs1 TEAMXX
PF1=Help    PF3=Return    PF7=Backward    PF8=Forward to other services
  
```

2. Enter your password and then press Enter.

```

----- IBM Santa Teresa Lab TSO LOGON (STLMVS1) -----
Enter LOGON information below:

  USERID      ==>> TEAMXX

  PASSWORD     ==>> _                NEW PASSWORD ==>>

  LOGON PROC   ==>> LOGON
  
```

3. Once you have an ISPF prompt, enter PDF 6.
4. On the ISPF command panel, select the following command and then press Enter
 Ex 'idl.ics31p.sidlcexe(idlc000)' 'idl.ics31p TEAMXX.v318'

You should now be presented with the first panel of the Control Suite. Bypass this panel by pressing Enter.

```

Press ENTER to continue.

=====  =====  =====  =====  *
=====  =====  =====  =====
===      ===      =====  =====  =====
===      =====  =====  =====
===      =====  === =====
===      ===      =====  === =====
=====  =====  =====  === =====
=====  =====  =====  = =====

Information Management System IMS Database Control Suite
(IMS DB CS) Version 3 Release 1

-----
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-----

* Trademark of International Business Machines
  
```


Exercise 2. IMS Base Image Copy

In this exercise you will generate and submit the JCL to run an IMS base image copy.

Exercise Steps

1. Select CS ID IMS8T

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE
                                for CS ID IMS8T  IMS Version 8.1
Command ===>

Press END to exit

Enter F string on the ISPF command line to find a CSID or other field
Enter F by itself to redisplay the full table.

Control Suite ID List

New CS IMS ID . .

Select (S) or delete (D)
      IMS
CS ID  Version      Date      Time      ID      Non-SMS
IMS8T  8.1          09/15/03  13:20:37  TEAMXX  VOLSER
```

2. On the main menu, select option 2. Run jobs. You will be presented with a list of job categories that the Control Suite can generate JCL for.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE
                                for CS ID IMS8T  IMS Version 8.1
Command ===>

                                TIME.  .11:49:10.18
                                DATE.  .2003/09/19
                                JDTE.  .2003.200
                                PRFX.  .TEAMXX

Select a task or press END to exit

Tasks    . . 2    1. Set up environment
                2. Run jobs
                3. Maintain RECON
                4. Perform library integrity checking
                5. ISPF links to other IMS tools

                6. System administration
```

3. On the Run jobs menu, select option 1. Backup databases.

- Select DBDS group IMS8T002. This is the group of databases you will be taking the image copy of.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE                Row 2 from 2
BACKUP  DATABASES  function for CS ID IMS8T  IMS Version 8.1
Command ==>

Press END to exit

BACKUP      DBDSGRP list

Enter F string on the ISPF command line to find a DBDSGRP, DBD/DDN/DSN or
Description. Enter F by itself to redisplay the full table.

Select (S)

                                DB
                                REG'D TYPE
DBDSGRP      DESCRIPTION
IMS8T002     Order system DBDSGRP      Y
***** Bottom of data *****

```

- Select the job you wish to run from the list of backup jobs available for this DBDS group. For this workshop, select job ORD1IC1 'Image Copy Databases'.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE                2 Matches
BACKUP  DATABASES  function for CS ID IMS8T  IMS Version 8.1
Command ==>

Press END to exit

BACKUP      job list for DBDSGRP  IMS8T002
USERID for jobname . . . (Y or N)      USERID jobname suffix . .
Edit last job built . . N (Y or N)
Alternate DBDLIB . .
User JCLPDS library . .

Select (S)
JOBNAME  ALTNAME  DESCRIPTION
ORD1IC1  IMAGE COPY DATABASES
ORD1I21  IMAGE COPY 2 DATABASES
***** Bottom of data *****

```

- You will now be presented with your generated JCL in an ISPF edit environment. Scroll down using PF8 and review this JCL. Notice that 6 separate jobs have been generated because DBDS group IMS8T002 contains 6 databases and indexes.
- Submit this JCL by typing 'sub' in the command line and pressing Enter.

8. Enter PF3 and you are now presented with a panel that allows you to save your generated JCL in a PDS. For this workshop, do not save your JCL, instead back out to the main menu by pressing PF3 four times.

```
                IMS DB CONTROL SUITE(C) V3.1 - BASE
BACKUP  DATABASES  function for CS ID IMS8T  IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit

Save generated JCL for a single job (optional)

Data set name      . .
Member name        . .

|IMS8 BACKUP DATABASES function ended. |
```

Exercise 3. IMS ICE Image Copy

In this exercise you will update your Control Suite environment to use the IBM Image Copy Extensions tool. Then, you will once again generate and submit JCL to run an image copy on DBDS group IMS8T002.

Exercise Steps

1. On the main menu, select option 1. Set up environment, and press Enter.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE
                                for CS ID IMS8T  IMS Version 8.1
Command ==>
                                TIME.  .11:49:10.18
                                DATE.  .2003/09/19
                                JDTE.  .2003.200
                                PRFX.  .TEAMXX

Select a task or press END to exit

Tasks  . . 1  1. Set up environment
              2. Run jobs
              3. Maintain RECON
              4. Perform library integrity checking
              5. ISPF links to other IMS tools

              6. System administration
```

2. On the Setup menu, select option 1. Add or remove IMS tools, and press Enter.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE
                                function for CS ID IMS8T  IMS Version 8.1
SETUP
Command ==>
                                TIME.  .13:30:00.72
                                DATE.  .2003/09/19
                                JDTE.  .2003.200

Select a subtask to continue or END to exit

Subtask . . 1  1. Add or remove IMS tools
              2. Define Control Suite environment
              3. Collect/update/delete DBDSGRPs
              4. Register databases in DBDSGRPs
              5. Review defined/collected data
```

3. Enter the load library for the Image Copy Extensions tool and press Enter.
*Note : The load library to use will be provided to you by the speakers.

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE
SETUP      IMS TOOLS              function for CS ID IMS8T  IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit

Product name                      Load library name or 'N' if not installed
Image Copy Extensions              . . N
High Performance Unload            . . N
High Performance Load              . . N
IMS Parallel Reorg                 . . N
Fast Prefix Resolution             . . N
Index Builder                      . . N
High Performance Ptr Checker       . . N
Library Integrity Utilities        . . N
Fast Path Basic Tools              . . N
Database Recovery Facility         . . N
REXX/CLIST libraries required to launch ISPF links to other products
Product name                      Library name or 'N' if not installed
Database Repair Facility           . . N
High Performance Change Accum      . . N
HALDB Conversion Aid              . . N

```

4. On the main menu, select option 2. Run jobs.
5. On the Run jobs menu, select option 1. Backup databases.
6. Again, select DBDS group IMS8T002 . This is the group of databases you will be taking the image copy of using the ICE tool.
7. Select the job you wish to run form the list of backup jobs available for this DBDS group. Once again, select job ORD1IC1 'Image Copy Databases'.
8. You will now be presented with your generated JCL in an ISPF edit environment. Scroll down using PF8 and review this JCL. Notice the ICE Image Copy Step that now appears in your JCL. This time, only one job has been created.
9. Submit this JCL by typing 'sub' in the command line and pressing Enter.
10. Enter PF3 and you are now presented with a panel that allows you to save your generated JCL in a PDS. Again, do not save your JCL, instead back out to the main menu by pressing PF3 four times.

Exercise 4. Reorganization job stream

In this exercise you will quickly generate the JCL needed to perform a complex reorganization job.

Exercise Steps

1. On the main menu, select option 2. Run jobs and press Enter.
2. On the Run Jobs menu, select option 6. All jobs and press Enter.
3. Again, select DBDS group IMS8T002. You will be presented with a list of all jobs available for this DBDS group.

```
IMS DB CONTROL SUITE(C) V3.1 - BASE                               Matches
ALL JOBS                function for CS ID IMS8T IMS Version 8.1
Command ===>

Press END to exit

ALL JOBS  job list for DBDSGRP  IMS7T002
USERID for jobname . . . (Y or N)          USERID jobname suffix . .
Edit last job built . . . (Y or N)
Alternate DBDLIB . .
User JCLPDS library . .

Select (S)
JOBNAME  ALTNAME  DESCRIPTION
ORD1IC1  .        IMAGE COPY DATABASES
ORD1I21  .        IMAGE COPY 2 DATABASES
ORD1RE1  .        REORG DATABASES
ORD1RE21 .        IMAGE COPY/REORG/IMAGE COPY DATABASES
ORD1REI1 .        REORG/IMAGE COPY DATABASES
ORD1RB1  .        RECOVER FROM LATEST IMAGE COPIES OF DATABASES
ORD1RI1  .        RECOVER A DATABASE/INDEX USING ICE
ORD1RI2  .        ICE RECOV DB & PRIME IDX/PTR CHK/REBUILD SECONDARIES
ORD1RD2  .        DBDSGRP DATABASE RECOVERY FACILITY
ORD1DYND .        BUILD DYNLIB MEMBERS FOR DATABASES
ORD1DYNR .        BUILD DYNLIB MEMBERS FOR RECON DATA SETS
***** Bottom of data *****
```

4. Select the Image Copy/Reorg/Image Copy Databases job, ORD1RE21.
5. You will now be presented with your generated JCL in an ISPF edit environment. Scroll down using PF8 and review this JCL. The Control Suite has quickly generated JCL for a very complex reorg. job. For this session, please do not submit this job.
6. Enter PF3 and you are now presented with a panel that allows you to save your generated JCL in a PDS. Again, do not save your JCL, instead back out to the main menu by pressing PF3 four times.

Exercise 5. RECON Maintenance

In this exercise you will use the Control Suite's interactive interface to the RECON to invalidate one of the image copies you recently took.

Exercise Steps

1. On the main menu, select option 3. Maintain RECON, and press Enter.
2. Select DBDS group IMS8T002 and press Enter.
3. Now, find all the DBRC 'change' commands by typing 'f change' on the command line and pressing Enter.

```

                IMS DB CONTROL SUITE(C) V3.1 - BASE                17 Matches
RECON  RECON  SELECTION function for CS ID IMS8T  IMS Version 8.1
Command =====> f change                                     Scroll =====> CSR

Press ENTER to continue or END to exit

Enter F string on the ISPF command line to display commands with that string
in the description field. Enter F without a string to display all commands.

Select (S) or help (H)
COMMAND  DESCRIPTION
CADS8    CHANGE.ADS, CHANGE AREA DATASET, VERSION 8
CBA8     CHANGE.BKOUT, CHANGE INVALID BACKOUT RECORDS, VER. 8
CCAGRP8  CHANGE.CAGRP, CHANGE CAGRP RECORD, VERSION 8
CCA8     CHANGE.CA, CHANGE A CHANGE ACCUMULATION, VERSION 8
CDBDSGR8 CHANGE.DBDSGRP, CHANGE A DBDSGRP RECORD, VERSION 8
CDBDS8   CHANGE.DBDS, CHANGE A DBDS RECORD, VERSION 8
CDB8     CHANGE.DB, CHANGE A DB RECORD, VERSION 8
CIC8     CHANGE.IC, CHANGE IMAGE COPY PARAMETERS, VERSION 8
CPART8   CHANGE.PART, CHANGE A PARTITION DATASET, VERSION 8
CPRILOG8 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (OLDS), VERSION 8
CPRIRLD8 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (RLDS), VERSION 8
CPRISLD8 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (SLDS TSLDS), VER 8
CRECON8  CHANGE.RECON, MODIFY THE RECON, VERSION 8
CSECOLD8 CHANGE.SECLOG, CHANGE A SECONDARY LOG RECORD (OLDS), VERSION 8
CSECRLD8 CHANGE.SECLOG, CHANGE A SECONDARY LOG RECORD (RLDS), VERSION 8
CSECSLD8 CHANGE.SECLOG, CHANGE A SECONDARY LOG REC (SLDS TSLDS), VER 8
CSG8     CHANGE.SG, CHANGE SERVICE GROUP, VERSION 8
CSUBSYS8 CHANGE.SUBSYS, CHANGE A SUBSYSTEM RECORD, VERSION 8
DCA8     DELETE.CA, DELETE CHANGE ACCUMLATION RUN RECORD, VERSION 8
***** Bottom of data *****
```

4. From the new list, select the Change IC command, CIC8, and press Enter.
5. Select the first GDG image copy in the list presented and press Enter.

6. Tab down to the VALID/INVALID field. (You can utilize field level help on this field by pressing PF1 and confirming this is the correct field to change when invalidating an image copy)

```

                IMS DB CONTROL SUITE(C) V3.1 - BASE                Matches
RECON      CHANGE  IMAGE COPY SEL. function for CS ID  IMS8T  IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit

Image Copy Update

Record count          . .          (Optional)
Select (S)
  DBNAME      DDN/AREA CPY      GDG DSNAME
  SMPORDP1    SMPORD1P 1      TEAMXX.IC.SMPORDP1.SMPORD1P.G0002V00

COPY TIME          VALID/INVALID      FILESEQ      RECORD CT.      GDGUNIT
  03.200 15:18:56.4          INVALID          0001          2          3400
STOP TIME          VOLSER list
  00.000 00:00:00.0          SYS136

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

```

7. Select the changed row and then press Enter.
8. Next, you will be presented with the full DBRC command. Once you have verified it for completeness, press PF3 to exit the command edit panel.

```

EDIT      TEAMXX.IMS8T.SYSIN                Columns 00001 00072
Command ==>                Scroll ==> PAGE
***** ***** Top of Data *****
000001  CHANGE.IC +
000002  DBD(SMPORDP1) DDN(SMPORD1P) +
000003  ICDSN(TEAMXX.IC.SMPORDP1.SMPORD1P.G0002V00) INVALID +
000004  UNIT(3400) FILESEQ(0001) +
000005  VOLLIST(SYS136) +
000006  RECTIME(032001518564)
***** ***** Bottom of Data *****

```

9. On the next panel, enter 'Y' to initiate the command.
10. Browse the output for successful command execution.
11. Now, return to the main menu by pressing PF3 four times.

*Note: The Maintain RECON function of Control Suite v3 supports all DBRC commands. Feel free to return to the Maintain RECON function and explore any of the commands you are interested in. Consult help or one of the instructors for more information.

Commands supported by the Maintain RECON function include...

```

                                IMS DB CONTROL SUITE(C) V3.1 - BASE                82 Matches
RECON   RECON   SELECTION function for CS ID IMS7T   IMS Version 7.1
Command =====>                                Scroll ==>  CSR

Press ENTER to continue or END to exit

Enter F string on the ISPF command line to display commands with that string
in the description field. Enter F without a string to display all commands.

Select (S) or help (H)
COMMAND  DESCRIPTION
BACKRE7  BACKUP.RECON, BACKUP RECONS COPY1, COPY2, OR BOTH
CADS7    CHANGE.ADS, CHANGE AREA DATASET, VERSION 7
CBA7     CHANGE.BKOUT, CHANGE INVALID BACKOUT RECORDS, VER. 7
CCAGRP7  CHANGE.CAGRP, CHANGE CAGRP RECORD, VERSION 7
CCA7     CHANGE.CA, CHANGE A CHANGE ACCUMULATION, VERSION 7
CDBDSGR7 CHANGE.DBDSGRP, CHANGE A DBDSGRP RECORD, VERSION 7
CDBDS7   CHANGE.DBDS, CHANGE A DBDS RECORD, VERSION 7
CDB7     CHANGE.DB, CHANGE A DB RECORD, VERSION 7
CIC7     CHANGE.IC, CHANGE IMAGE COPY PARAMETERS, VERSION 7
CPART7   CHANGE.PART, CHANGE A PARTITION DATASET, VERSION 7
CPRILOG7 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (OLDS), VERSION 7

CPRIRLD7 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (RLDS), VERSION 7
CPRISLD7 CHANGE.PRILOG, CHANGE A PRIMARY LOG RECORD (SLDS TSLDS), VER 7
CRECON7  CHANGE.RECON, MODIFY THE RECON, VERSION 7
CSECOLD7 CHANGE.SECLOG, CHANGE A SECONDARY LOG RECORD (OLDS), VERSION 7
CSECRD7  CHANGE.SECLOG, CHANGE A SECONDARY LOG RECORD (RLDS), VERSION 7
CSECSLD7 CHANGE.SECLOG, CHANGE A SECONDARY LOG REC (SLDS TSLDS), VER 7
CSG7     CHANGE.SG, CHANGE SERVICE GROUP, VERSION 7
CSUBSYS7 CHANGE.SUBSYS, CHANGE A SUBSYSTEM RECORD, VERSION 7
DADS7    DELETE.ADS, DELETE THE AREA DATASET, VERSION 7

DALLOC7  DELETE.ALLOC, DELETE AN ALLOCATION RECORD, VERSION 7

DBA7     DELETE.BKOUT, DELETE BACKOUT RECORD INFORMATION, VERSION 7
DCAGRP7  DELETE.CAGRP, DELETE CA GROUP IN RECON, VERSION 7
DCA7     DELETE.CA, DELETE CHANGE ACCUMLATION RUN RECORD, VERSION 7
DDBDSGR7 DELETE.DBDSGRP, DELETE DBDS GROUP RECORD, VERSION 7
DDBDS7   DELETE.DBDS, ALL RECORDS ASSOCIATED WITH THE DDN, VERSION 7
DDB7     DELETE.DB, DELETE DB AND ALL ASSOCIATED DBDS RECORDS VERSION 7

DGSG7    DELETE.GSG, DELETE A GLOBAL SERVICES GROUP, VERSION 7
DIC7     DELETE.IC, DELETE AN IMAGE COPY RECORD, VERSION 7
DLOGO7   DELETE.LOG, DELETE AN DATA SET ENTRY (OLDS), VER 7
DLOGR7   DELETE.LOG, PRILOG, SLDS, RLDS, AND INACTIVE RECORDS, VER 7
DPART7   DELETE.PART, DELETE A PARTITION DATASET, VER. 7
```

Select (S) or help (H)

COMMAND	DESCRIPTION
DRECOV7	DELETE.RECOV, DELETE A RECOVERY RECORD, VERSION 7
DREORG7	DELETE.REORG, DELETE A REORG RECORD, VERSION 7
DSG7	DELETE.SG, DELETE A SERVICE GROUP ENTRY, VERSION 7
DSUBSYS7	DELETE.SUBSYS, DELETE A SUBSYSTEM RECORD, VERSION 7
IADS7	INIT.ADS, INITIALIZE THE AREA DATASET, VERSION 7
ICAGRP7	INIT.CAGRP, INITIALIZE CAGRP RECORDS, VERSION 7
ICA7	INIT.CA, INITIALIZE CA BACKUP DATASET, VERSION 7
IDBDSGRP7	INIT.DBDSGRP, INITIALIZE GROUP RECORDS, VERSION 7
IDBDS7	INIT.DBDS, INIT A DBDS RECORD, VERSION 7
IDB7	INIT.DB, REGISTER A DATABASE WITH DBRC, VERSION 7
IGSG7	INIT.GSG, INITIALIZE GLOBAL SERVICES GROUP, VERSION 7
IIC7	INIT.IC, INITIALIZE AN IMAGE COPY RECORD, VERSION 7
IPART7	INIT.PART, REGISTER A HALDB PARTITION, VER. 7
ISG7	INIT.SG, DEFINE A SERVICE GROUP MEMBER, VERSION 7
LBKOUT7	LIST.BKOUT, BACKOUT RECORD INFORMATION, VERSION 7
LCAGRO7	LIST.CAGRP MEMBER INFORMATION, VERSION 7
LCAGRP7	LIST.CAGRP, LIST CAGRP RECORDS IN RECON, VERSION 7
LDBDSGRP7	LIST.DBDSGRP, LIST DBDSGRP RECORDS, VERSION 7
LDBDS7	LIST DATABASE DATASET (DBDS) NAMES IN RECON, VERSION 7
LDBD7	LIST.DBD, THE LIST.HISTORY DBD VERSION OF THE COMMAND, VER 7
LDBS7	LIST.DBDS, THE LIST.HISTORY DBDS VERSION OF THE COMMAND, VER 7
LDB7	LIST DATABASE RECORDS (DB) IN RECON, VERSION 7
LGSG7	LIST.GSG, LIST GLOBAL SERVICE GROUP, VERSION 7
LHISTC7	LIST.HISTORY CAGRP, LIST THE HISTORY OF THE GROUP, VERSION 7
LHISTD7	LIST.HISTORY DBD, INCLUDING LIST.DBD AND LIST.DBDS, VERSION 7
LHIST7	LIST.HISTORY DBDSGRP, LIST GROUP HISTORY, VERSION 7
LIC7	LIST IC, ALL IMAGE COPY VALUES, VERSION 7
LLOGP7	LIST.LOG, PRILOG BY STARTDATE, SSID, AND GSG, VERSION 7
LLOG7	LIST.LOG, INFORMATION FROM ALL THE LOGS, VERSION 7
LRECON7	LIST.RECON, INFORMATION ABOUT THE WHOLE SYSTEM, VERSION 7
LSUBSYS7	LIST.SUBSYS, SUBSYSTEM INFORMATION, VERSION 7
NALLOC7	NOTIFY.ALLOC, ADD INFORMATION TO A DB OR DBDS, VERSION 7

COMMAND	DESCRIPTION
NBA7	NOTIFY.BKOUT, CREATE A BACKOUT RECORD, VERSION 7
NCA7	NOTIFY.CA, ADD INFORMATION ABOUT THE CA UTILITY, VERSION 7
NIC7	NOTIFY.IC, ADD INFORMATION ABOUT AN IMAGE COPY, VERSION 7
NPRIOLD7	NOTIFY.PRILOG, ADD INFORMATION TO THE LOG (OLDS), VER 7
NPRIRLD7	NOTIFY.PRILOG, ADD INFORMATION TO THE LOG (RLDS), VER 7
NPRISLD7	NOTIFY.PRILOG, ADD INFORMATION TO THE LOG (SLDS/TSLDS), VER 7
NRECOV7	NOTIFY.RECOV, ADD RECOVERY INFORMATION, VERSION 7
NREORG7	NOTIFY.REORG, ADD REORGANIZATION INFORMATION, VERSION 7
NSECOLD7	NOTIFY.SECLOG, ADD INFORMATION TO SECONDARY LOG (OLDS), VER 7
NSECRLD7	NOTIFY.SECLOG, ADD INFORMATION TO SECONDARY LOG (RLDS), VER 7
NSECSLD7	NOTIFY.SECLOG, ADD INFORMATION TO SEC. LOG (SLDS TSLDS), VER 7
NSUBSYS7	NOTIFY.SUBSYS, CREATE A SUBSYSTEM RECORD, VERSION 7
RSG7	RESET.GSG, REMOVE OBSOLETE RECOVERY INFORMATION, VERSION 7
UBATCH7	UTIL, CREATE A RECON MAINTENANCE BATCH JOB, VER. 7
UCATLG7	UTIL, LIST CATALOG, LISTC LEVEL FOR RECONS
UCOPYRE7	UTIL, COPY RECONS TO USER DEFINED DSNAME, VERSION 7
UDELMEM7	UTIL, DELETE AUDIT.LOG MEMBERS BEFORE A SET DATE, VERSION 7
UINITRE7	UTIL, INIT.RECON, CONDITIONAL CREATE AND INITIALIZATION, VER.7
UJOB7	UTIL, JOBCARD FOR NON-CS GROUP IDS
UREORG7	UTIL, REORGANIZE THE RECONS, VERSION 7
UREP01V7	UTIL, EXCEPTIONAL CONDITIONS IN THE RECON, VERSION 7
***** Bottom of data *****	

Good luck and have fun. Use the help key (PF1) for more information or ask one of the instructors.

Summary

Geoff Jackson and Joe Sacco will be available on the demo floor to further discuss the IMS Database Control Suite.

Thank you for participating.

Addendum - Set up environment

In this exercise you will Set Up the Control Suite environment by defining your global JCL parameters and collecting a group of related DBDs.

Exercise Steps

1. On the main menu, select option 1. Set up environment, and press Enter.
2. On the Set Up main menu, select option 2. Define Control Suite environment and press Enter.

```
IDLPS0          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP          function for CS ID IMS8T IMS Version 8.1
Command ==>

                                     TIME.  .13:36:08.85
                                     DATE.   .2003/06/05
                                     JDTE.   .2003.156

Select a subtask to continue or END to exit

Subtask . . 2   1. Add or remove IMS tools
                2. Define Control Suite environment
                3. Collect/update DBDSGRP data
                4. Register databases in DBDSGRPs
                5. Review defined/collected data
```

3. Panel 1 of the Define function is where you specify your global JCL options the Control Suite will use when generating JCL. Review this panel and press Enter.

```
IDL$SYS        IMS CONTROL SUITE(C) V3.1 - BASE
SETUP  DEFINE  JCL PRMS function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit                                     Panel 1 of 3

SMS class      . . 1          (N, 1=storage, 2=mgmt or 3=data)
DASD device type . . 3390     (3380 or 3390)
DASD unit      . . SYSALLDA   (Esoteric name or blank if SMS N)
TAPE unit      . . 3480       (Esoteric name)
Tape retention . . 21         (Days)
Work space-utilities . . 100   (Primary cylinders)
                . . 100       (Secondary cylinders)
Work space-SORT . . 100       (Primary cylinders)
                . . 100       (Secondary cylinders)
SORT library dsname . . SYS1.SORTLIB
IMS utility buffers . . 50     (VSAM)
                . . 50        (OSAM)
```

4. Panel 2 of Define is where you specify your RECON and IMS system data sets.

```

IDL$IMS                IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   DEFINE        IMS LIBS function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit                                Panel 2 of 3

IMS RECON data sets
RECON1   . . GGJ.CSVER227.IVP.RECON1          VOLSER . . SYS158
RECON2   . . GGJ.CSVER227.IVP.RECON2          VOLSER . . SYS158
RECON3   . . GGJ.CSVER227.IVP.RECON3          VOLSER . . SYS158
IMS system data sets
DBDLIB   . . GGJ.CSVER227.IVP.DBDLIB
PSBLIB   . . GGJ.CSVER227.IVP.PSBLIB
SDFSRESL . . IMSVS.I71RTS2A.CRESLIB
ACBLIB   . . IDL.SAMPLE.ACBLIB
EXITLIB  . . ICING1.IIU.IBTEST.TNUC1
DYNLIB   . . GGJ.CSVER227.IVP.DYNLIB
SDFSMAC  . . IMSVS.IMSB.MACLIB
MODBLKS  . . IMSVS.IMSB.MODBLKS
PROCLIB  . . IMSVS.IMSB.PROCLIB
    
```

5. Panel 3 of Define allows you to specify a history data set to be used for the various jobs generated by the Control Suite.

```

IDL$UTIE              IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   DEFINE        IMS LIBS function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit                                Panel 3 of 3

Space Management History Data Set Information

Data set name          . . GGJX.IMS7J.HISTORY
CYLS                   . . 5
VOLSER                 . . *
    
```

6. Next, from the Set Up main menu, select option 3. Collect/update DBDSGRP data and press Enter.

7. From the Collect main menu, select option 1. Collect/update image copy naming convention data, and press Enter.

```

IDLPS01              IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   COLLECT      function for CS ID IMS8T IMS Version 8.1
Command ==>

TIME. .13:41:11.04
DATE. .2003/06/05
JDTE. .2003.156

Select a subtask to continue or END to exit

Subtask . . 1      1. Collect/update image copy naming convention data
                  2. Collect/update database data set data
                  3. Update jobcard data only
    
```

8. On the next panel, select the DBDS group IMS8T002, this is the DBDS group we have been working with.
9. The next two panels of Collect allow you to specify your image copy naming convention data. Field level help is available for any field you need explained.

```

IDLSOPT1          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   COLLECT   function for CS ID IMS7J IMS Version 7.1
Command ==>

Press ENTER to continue or END to exit.                               Panel 1 of 2

Specify JCL options for DBDSGRP . . INVTST1

Image Copy indexes . . Y          (Y or N)
ICE Create Image Copy. . N        (Y or N)
Job name prefix . . . INV1
DBDSGRP title . . . Invoicing system ISPF collect

Unload data set options
Use GDGs . . . N          (Y or N)
DASD low level qual . .
Tape low level qual . .
Tape volume count . . . (1 to 99)

```

```

IDLSOPT3          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   COLLECT   function for CS ID IMS7J IMS Version 7.1
Command ==>

Press ENTER to continue or END to exit                               Panel 2 of 2

Specify Global Image Copy Options for DBDSGRP . . INVTST1
IC1 high-level qualifiers . . GGJX.CSVER317
IC2 high-level qualifiers. .
IC middle qualifiers . . 2          (1=DDN, 2=DBD.DDN)
IC low-level qualifier . .          (blank if GDG, name, $TIME, nn.$TIME)
GDG device type . . . SYSDA        (SYSDA, TAPE, ATL2, other)
Type . . . D          (D=DASD, T=Tape)
Unit . . . G          (8=3380, 9=3390, G=GDG, *=SMS)
Recovery period in RECON . . 0      RECON GENMAX . . 2
Tape retention period . . 99        Tape data set volume count. .
Online Image Copy Options (if OIC is going to be used)
PSB. . . DESTNAME . . . Applic Group Name (AGN) . .
User's GENJCL JCLPDS data set and members (blank if using CS default names)
NOJOB parameter . . . (Y or N)
Data set . . .
Image Copy . . . Online Image Copy . . . Recovery . .

```

10. When you are through with this portion of Collect, return to the Collect main menu and select option 2. Collect/update database data set data.

11. Again, select DBDS group IMS8T002. You will now collect all of the related databases for this DBDS group.
12. On the next panel, you will be asked whether or not you would like to build a DBD list file. Answer with a 'Y' on this panel and press Enter.

```

IDLSOPT2          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP   COLLECT   function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit.                               Panel 1 of 4

Specify DBD input and other JCL options for DBDSGRP . . ORDST1

Build DBD list file          . . Y          (Y or N)
Check ACBLIB                 . . N          (Y or N)
Alternate DBD library        . .

```

13. You will now be asked which DBDs to include in this group. Select only SMPORDP1 and SMPPAYP1. The Control Suite will find all physical and logical relationships that exist and build a complete DBDS group using this nucleus.

```

IDLSMAIR          IMS CONTROL SUITE(C) V3.1 - BASE                      Row to of
SETUP   COLLECT   function for CS ID IMS8T IMS Version 8.1
Command ==>

Press END to exit                                                    Panel 2 of 4

DBD name filter          . .

Select (S) or Delete (D)
  DBD
  SMPINVP1
s  SMPORDP1
  SMPORDX1
  SMPORDY1
  SMPORDY2
s  SMPPAYP1
  SMPPAYY1
  SMPSUPP1
  SMPSUPX1
  SMPTABP1
***** Bottom of data *****

```

14. On the next panel you have the opportunity to change the share level of any DBD in the group. Press Enter to continue.

```

IDLSCTL3          IMS CONTROL SUITE(C) V3.1 - BASE          Row to of
SETUP    COLLECT  function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit          Panel 3 of 4

Update DBRC share levels DBDSGRP . . IMS8T002

Propagate global SHR LVL . . N (N, 0, 1, 2, or 3)

Change share level (0, 1, 2 or 3)
SHR
LVL  DBD          DDNAME      PART          PRIMEDEB      INDEX
3    SMPORDP1     SMPORD1P     N/A           SMPORDP1      N/A
3    SMPORDX1     SMPORD1X     N/A           SMPORDP1      PRIMARY
3    SMPORDY1     SMPORD1Y     N/A           SMPORDP1      SECONDARY
3    SMPPAYP1     SMPPAY1P     N/A           SMPPAYP1      N/A
3    SMPORDY2     SMPORD2Y     N/A           SMPORDP1      SECONDARY
3    SMPPAYY1     SMPPAY1Y     N/A           SMPPAYP1      SECONDARY
***** Bottom of data *****

```

15. The last panel of Collect allows you to specify a job card to be used with the jobs the Control Suite generates for you. After this panel, you are ready to run jobs. All of the DBDs in the group have been automatically registered with the RECON and a complete job list has been built.

```

IDLSJBCP          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP    COLLECT  function for CS ID IMS8T IMS Version 8.1
Command ==>

Press ENTER to continue or END to exit          Last panel in function

. . //&JOBNAME JOB (GGJX),
. . //          'GEOFFB', REGION=0M, TIME=5, MSGCLASS=H, CLASS=A,
. . //          NOTIFY=GGJX
. . // *

```

16. Control Suite v3 allows you to also run the Collect function through a powerful batch job that will automatically collect every DBDS group, register the individual DBDs with the RECON, and store the generated jobs for each group in a PDS file.

```

IDLPS01          IMS CONTROL SUITE(C) V3.1 - BASE
SETUP    COLLECT  function for CS ID IMS8T IMS Version 8.1
Command ==>

TIME. .13:54:29.64
DATE. .2003/06/05
JDTE. .2003.156

Select a subtask to continue or END to exit

Subtask . . 4    1. Collect/update image copy naming convention data
                2. Collect/update database data set data
                3. Update jobcard data only

                4. Batch collect DBDSGRPs and jobs for ALL DEB LIB members

```