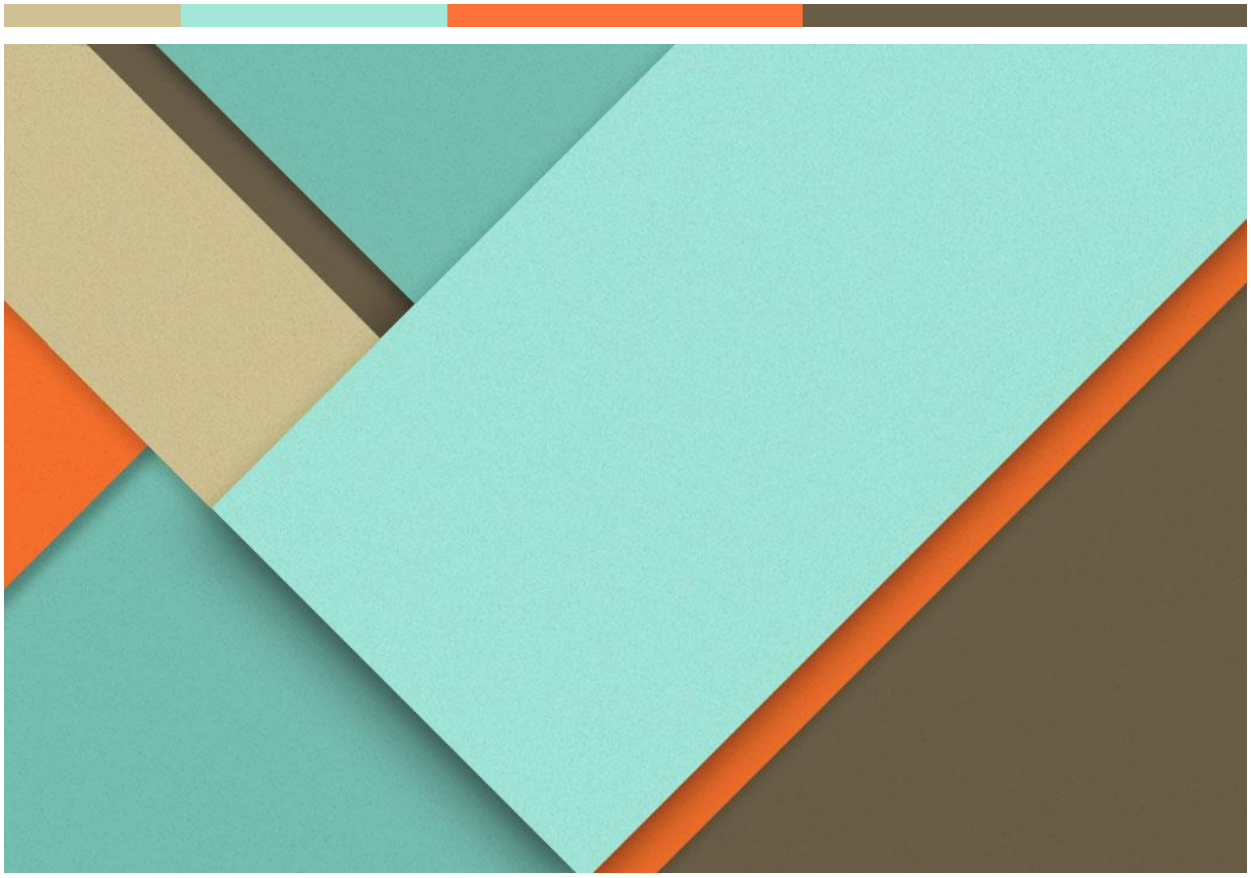
Srinimf



CA7 Screens - Mainframe

Powered by:

www.srinimf.com

1 CA-7 LOGON/LOGOFF:

OPTION UCC7

----------*** M&S CA7 (3.2) HC01 ***----------

PLEASE ENTER LOGON DATA OR PRESS PF3 TO DISCONNECT

CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97

USERID : DSR013 TERMINAL NAME : VTM002 DATE : 99.166

PASSWORD : VTAM APPLID : UCC7 TIME : 16:05:53

NEW PASSWORD : LUNAME : A20MT267 LEVEL : V3L2 (9802)

UID RESOURCE :

PARMS :

```
 CCCCCCCCCCC          AAAAAAAAAA          77777777777
 CCCCCCCCCCC   AAAAAAAAAA          77777777777
CCC                  AAA          AAA                  7777
CCC                  AAAAAAAAAA        0000   7777
CCC                  AAAAAAAAAA        0000   7777
CCC                  AAA          AAA                  7777
CCCCCCCCCCC  AAA          AAA                  7777
CCCCCCCCCCC AAA          AAA                  7777
```


MENU

----------*** M&S CA7 (3.2) HC01 ***----------

CA-7.023 LOGON ACCEPTED, PRESS ENTER FOR MENU OR ENTER COMMAND

CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97

USERID : DSR013 TERMINAL NAME : VTM002 DATE : 99.166

VTAM APPLID : UCC7 TIME : 16:09:44

LUNAME : A20MT267 LEVEL : V3L2 (9802)

CCCCCCCCCCC AAAAAAAAAA 77777777777

CCCCCCCCCCC AAAAAAAAAA 77777777777

CCC AAA AAA 7777

CCC AAAAAAAAAA 0000 7777

CCC AAAAAAAAAA 0000 7777

CCC AAA AAA 7777

CCCCCCCCCCC AAA AAA 7777

CCCCCCCCCCC AAA AAA 7777

LOGON IS COMPLETE!!!!

To LOGOFF:

Topline command – "/logoff"

/logoff

---------- CA-7 CPU JOB DEFINITION ----------

FUNCTION: LIST (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)

JOB: YSRWCP2

GENERAL: SYSTEM: JOBNET: OWNER: DSR000 UID: 0

JCL: ID: 145 MEMBER: YSRWCP2 RELOAD: N EXEC: Y RETAIN-JCL: N

LIB:

REQUIREMENTS: HOLD: N JCL-OVRD: N USE-OVRD-LIB: N VERIFY: N MAINT: N

SATISFACTION LEAD-TIME: JOB: 0 DSN: 0 ARFSET:

EXECUTION: MAINID: SY1 INSERT-RMS: N COND-CODE: 0 RO: NE

DONT SCHEDULE -- BEFORE: 00000 0000 AFTER: 99999 0000

MESSAGES: LTERM: MASTER REQUIREMENT-LIST: Y PROMPTS: N
ERROR MSGS -- RQMTS NOT USED: Y DSN NOT FOUND: Y

RESOURCES: REGION: 960 CLOCK-TIME: 0004 CPU-TIME: 00004
CLASS: A PRTY: 000 MSGCLASS: Q
TAPE DRIVES...TYPE1: 000 M 000 C TYPE2: 000 M 000 C

PROGRAM: SM20 MSG-INDX: 00 -- DB.1 -- 99.166 / 16:14:47
MESSAGE: LIST SUCCESSFUL

----------*** M&S CA7 (3.2) HC01 ***----------

CA-7.024 /LOGOFF SUCCESSFUL
CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97

USERID : TERMINAL NAME : VTM002 DATE : 99.166
PASSWORD : VTAM APPLID : UCC7 TIME : 16:16:14
NEW PASSWORD : LUNAME : A20MT267 LEVEL : V3L2 (9802)
UID RESOURCE :
PARMS :

```
          CCCCCCCCCCC  AAAAAAAAAA       77777777777
        CCCCCCCCCCC  AAAAAAAAAA       77777777777
          CCC                AAA          AAA          7777
          CCC                AAAAAAAAAA   0000       7777
          CCC                AAAAAAAAAA   0000       7777
          CCC                AAA          AAA          7777
    CCCCCCCCCCC  AAA       AAA            7777
    CCCCCCCCCCC  AAA       AAA            7777
```

2 Commonly used Commands:

Command	Purpose	Notes
LJOB,JOB=*******	Listing of job information.	
LPRRN,JOB=*******	Listing of last successful run	
XQJ	Gives list of jobs in queue	
LRDY	Lists jobs awaiting execution	
CANCEL,JOB=Y****	Cancels job off the queue	
/LOGON & /LOGOFF	Logs on and off CA-7.	
HELP	Gives help on commands, syntax, etc.	Once HELP has been typed, user should then type Þ Y and 1 to allow access to the correct screen.
DEMAND(H),JOB=Y***	Demands (hold[H] is optional) job into CA7. If [H] is used then it will wait in the XQJ screen until released.	Should be used in conjuction with SCHID=0xx if job is to be run on a particular day.

2.1 Other Useful Commands:

Command	Purpose	Notes
/DISPLAY,Q=ALL	Shows information on the queue.	
…LIST=ALL …LIST=NODD …LIST=TRIG …LIST=SID***	Shows everything for that job Shows everything except DD Shows trigger information only Shows triggers under 1 schedule ID only	Format: LJOB,JOB=PID****,LIST=NODD
LSCHD,JOB=DID****	Lists every job on the database with a summary of schedule information.	Can also add Status, so ST=EXP (expired schedules)
FSTRUC,SCHID=***, JOB=*******	Gives the order of triggered jobs under a given structure.	Please note that there can be more than one schedule ID for each job and for each day.

LRLOG	Details of previous runs since midnight	Add date=* which gives the last five days worth. Can also find out which jobs ran late or were cancelled by using ST=LATE/CANC
LJCL,JOB=Y****	Lists JCL deck to be used by job="x", regardless of whether it's in the queue (XQJ).	
LISTDIR,DSN=library, MEM=member	Lists members of PDS	
LQ/LQUE	Lists queue information	Can add Status, eg ST=HELD,LATE,SUBM,ABND Generally displays information about all jobs that are on the CA-7 queue including the current status of the jobs.
LIST	Lists jobs which have fallen over	
/DISPLAY,ST=JCL	Listing of all JCLID's and their associated library.	
LJES	Lists jobs that have been sent to JES	
HOLD,JOB=Y****	Holds job in CA-7 queue (XQJ)	
LQP,JOB=Y*****	Lists job information from the Request and LRDY queues	Displays the current status of the job.This command shows you why a job may not be executing
POST,JOB=Y*****	Satisfies requirements for jobs.	Command followed by type of requirement to be met. IE. DSN=xx.xxxx.xxxxx or JOB=*******.
REQUEUE,JOB=Y****	Puts job back in XQJ when it's sitting in LRDY or LJES queues.	
SUBTM,JOB=Y*****	Allows you to make your job run at a particular time once	Followed by TIME=hhmm

	already on the XQJ queue.	
/PROF(S)	Lists and updates CA-7 user profiles.	

3 Resources & Profiles:

As part of it's security mechanism for jobs, CA7 uses userId resources and has profiles that can be set to allow access to those resources. This security is used to restrict access to jobs from users that do not have authority for the necessary profile.

Each of the systems have a userId (UID) resource set (e.g. UID = 158) for the majority of it's jobs so that they can only be browsed, updated or demanded by authorized users. Those jobs that interface or relate to another application, and hence require more open security to allow that application access to the jobs, have their UID set to 000 effectively having no security.

In order to access jobs with a non-zero UID the user must have RACF access to the relevant profile. As authority to multiple profiles is possible the user must also change the 'active' profile for viewing different applications. This can be done in UCC7 by entering the command: -

/PROF,R=CA7NNNN where NNNN is the UID number for the required application

Note: Once a resource has been 'activated', for a userId, it must be specified every time when logging on to UCC7, until such time as it is reset or changed – it is entered on the UCC7 logon panel in the UID resource field as CA7NNNN, where NNNN is the UID last activated.

An active resource can be reset by entering the /PROF,R=CA7NNNN command, replacing NNNN with zeros (i.e. UID = 0000). This will mean that the userId no longer has an active profile and hence does not need to specify that resource at logon.

Important: If a list of all jobs for an application is requested in CA7, but no resource (or the relevant resource) for that user is active, those jobs with a non-zero UID will not appear. More importantly, CA7 will provide no information that any jobs are missing from the listing. In effect, if the relevant resource for an application is not active, no information on 'secure', non-zero UID jobs, will be provided.

4 Triggering:

A trigger is a form of scheduling and is by far the most economical, efficient method to schedule jobs to run under CA-7 control. In an ideal situation, the very first job in a SYSTEM should always be scheduled by date/time…

There are two forms of triggering:

· COMPLETION of a job (job triggering)

· CREATION of a dataset (dataset triggering)

NOTE The Marks & Spencer standard specified that dataset triggers should only be used where absolutely necessary, for recovery work or to trigger a job based on a Return Code from a particular step!

Triggers are controlled by Schedule ID's. Whatever SCHID the job doing the trigger or creating the dataset is using will be propagated to any triggered job. This is true in all cases except when TRIGID is specified.

The following is an example of a typical use of TRIGID:

The "BACKUP" job runs twice in this sequence, it's the same job both times because remember that triggered jobs propagate their SCHID to following jobs, this is where a TRIGID is very useful, without it this sequence would LOOP.

BACKUP runs using SCHID = 1, under this ID it triggers UPDATE.

↓

UPDATE assumes SCHID = 1 from BACKUP, under this SCHID triggers REPORT.

↓

REPORT assumes SCHID = 1 from UPDATE, under this SCHID triggers BACKUP.

↓

BACKUP assumes SCHID = 1 from REPORT, under this SCHID triggers UPDATE.

UPDATE triggers REPORT…and so on.

To avoid this LOOP a TRIGID can be used. When REPORT triggers BACKUP it uses a TRIGID of 99.

BACKUP runs using SCHID = 1, under this ID it triggers UPDATE.

↓

UPDATE assumes SCHID = 1 from BACKUP, under this SCHID triggers REPORT.

↓

REPORT assumes SCHID = 1 from UPDATE, under this SCHID triggers BACKUP with a TRIGID of 99.

↓

BACKUP runs using SCHID = 99, under this SCHID it triggers nothing.

4.1 Getting to the JOB TRIGGERING screens:

The methods by which you can get to the CA-7 Job Triggering screens are:

1. Topline command – 'SCHD.JTRG'
2. Topline command – 'DB.2.4'
3. Select function 2 from the Data Base Maintenance Menu, then function 4.

---------- CA-7 DATA BASE MAINTENANCE MENU ----------

FUNCTION ===> 2

DATA BASE DEFINITION FOR:

1 - CPU JOB

2 - SCHEDULING

3 - JOB PREDECESSOR/SUCCESSOR

4 - WORKLOAD DOCUMENTATION

5 - INPUT/OUTPUT NETWORK

6 - DATA SET

OTHER FUNCTIONS AVAILABLE:

7 - JCL LIBRARY MAINTENANCE

8 - TEXT EDITOR

9 - CLEAR THE TEXT EDITOR ACTIVE AREA

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.166 / 10:17:37

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 SCHEDULING MENU ----------

FUNCTION ===> 4

DATE/TIME SCHEDULING FOR:

1 - CPU JOB

2 - INPUT NETWORK

3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:

4 - JOB TRIGGERING OTHER CPU JOB(S)

```
  5  - INPUT NETWORK TRIGGERING CPU JOB(S)
  6  - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:
  7  - MODIFICATION TO RESOLVED SCHEDULE DATES
  8  - BASE CALENDAR MAINTENANCE


PROGRAM: SM70      MSG-INDX:  00     -- DB.2       --   99.166  / 10:25:23
MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------------------------  CA-7 JOB TRIGGERING  ----------------------------
FUNCTION:  LIST       (FORMAT,LIST,UPD)                          PAGE 0001
JOB:   YSRWCP2
OPT SCHID TRGD-JOB TRGID  DOTM  QTM   LDTM  SBTM *---- EXCEPTIONS ----*
          000   YSRWCP3                        0010    0010



OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR
PROGRAM: SM75      MSG-INDX:  00     -- DB.2.4     --   99.166  / 10:27:06
MESSAGE: LIST FUNCTION SUCCESSFUL
         END OF DATA REACHED
```

When wanting to change or add a trigger, under the “OPT” field, you have the option of placing an “A” or a “D” (ADD & DELETE respectively) on the respective line. So if you wanted to change the trigger from YSRWCP2 → YSRWCP3 to YSRWCP2 → YSRWCP4, for example, you would do the following:

```
---------------------------  CA-7 JOB TRIGGERING  ----------------------------
FUNCTION:  upd        (FORMAT,LIST,UPD)                          PAGE 0001
JOB:   YSRWCP2
OPT SCHID TRGD-JOB TRGID  DOTM  QTM   LDTM  SBTM *---- EXCEPTIONS ----*
 d       000     YSRWCP3                      0010   0010
 a       000     YSRWCP4                      0010   0010
```

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

PROGRAM: SM75 MSG-INDX: 00 -- DB.2.4 -- 99.166 / 11:46:37

MESSAGE: LIST FUNCTION SUCCESSFUL

END OF DATA REACHED

5 CPU Job Definition:

Each job to be controlled by CA-7 must first be defined in its database, the easiest method to do this is to "ADD" the job using the JOB SCREEN, Panel "DB.1" or just use the Topline command "JOB".

---------- CA-7 CPU JOB DEFINITION ----------

FUNCTION: (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)

JOB:

GENERAL: SYSTEM: JOBNET: OWNER: UID:

JCL: ID: MEMBER: RELOAD: EXEC: RETAIN-JCL:

LIB:

REQUIREMENTS: HOLD: JCL-OVRD: USE-OVRD-LIB: VERIFY: MAINT:

SATISFACTION LEAD-TIME: JOB: DSN: ARFSET:

```
 EXECUTION:            MAINID:         INSERT-RMS:  COND-CODE:           RO:
                     DONT SCHEDULE -- BEFORE:              AFTER:

 MESSAGES:             LTERM:          REQUIREMENT-LIST:  PROMPTS:
                             ERROR MSGS -- RQMTS NOT USED:     DSN NOT
FOUND:

 RESOURCES:            REGION:         CLOCK-TIME:           CPU-TIME:
                     CLASS:    PRTY:           MSGCLASS:
                     TAPE DRIVES...TYPE1:     M       C   TYPE2:       M       C

 PROGRAM:              MSG-INDX:  00    -- DB.1      --   99.166  / 10:56:47
 MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

 ------------------------  CA-7 CPU JOB DEFINITION  --------------------------
 FUNCTION:  LIST      (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)
 JOB:  YSRWCP2
 GENERAL:              SYSTEM:         JOBNET:         OWNER:  DSR000    UID:  0

 JCL:                  ID:  145   MEMBER:  YSRWCP2    RELOAD:  N   EXEC:  Y   RETAIN-JCL:  N

                         LIB:
 REQUIREMENTS:         HOLD:  N   JCL-OVRD:  N   USE-OVRD-
LIB:  N   VERIFY:  N   MAINT:  N
                         SATISFACTION LEAD-TIME:  JOB:  0    DSN:  0          ARFSET:


 EXECUTION:   MAINID:  SY1    INSERT-RMS:  N   COND-CODE:  0   RO:  NE
                     DONT SCHEDULE -- BEFORE:  00000  0000   AFTER:  99999  0000

 MESSAGES:    LTERM:  MASTER     REQUIREMENT-LIST:  Y   PROMPTS:  N
                     ERROR MSGS -- RQMTS NOT USED:  Y   DSN NOT FOUND:  Y

 RESOURCES:   REGION:  960    CLOCK-TIME:  0004   CPU-TIME:  00004
                         CLASS:  A   PRTY:  000          MSGCLASS:  Q
```

TAPE DRIVES...TYPE1: 000 M 000 C TYPE2: 000 M 000 C

PROGRAM: SM20 MSG-INDX: 00 -- DB.1 -- 99.166 / 11:01:09

MESSAGE: LIST SUCCESSFUL

A brief description of the Functions and Fields on this screen can be found in the "CA-7 User Guide – Version 3.0" (see Zak Broome-Levett or Ken Stowers for its location).

6 Dataset Definition:

CA-7 keeps information on its database on ALL DATASETS used by jobs run under its control. Dataset information can either be added manually using the DSN SCREEN, pnael "DB.6", or automatically through LOAD PROCESSING (CA-7 recognises NEW Datasets).

---------- CA-7 DATA SET DEFINITION ----------

FUNCTION: (ADD,DELETE,FORMAT,LIST,RENAME,UPD)

DSN:
DSNBR:

NEWNAME:

TYPE: GDG:

SMF FEEDBACK REQUIRED: POST AT CLOSE TIME:

DEVICE:

DSORG:

RECFM:

LRECL:

BLKSIZE:

PROGRAM: SM30 MSG-INDX: 00 -- DB.6 -- 99.166 / 11:13:47

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

6.1 Internal Datasets:

These are datasets which are created by a CA-7 controlled job (DISP=NEW). As the job runs it generates SMF information on the datasets it uses, hence CA-7 can keep track of when each dataset is created and AUTOMATICALLY satisfy dataset dependencies and triggers.

6.2 External Datasets:

These are datasets that are not created by a CA-7 controlled job and for which no SMF information is received. This being the case, CA-7 cannot satisfy any dependencies on these datasets, hence, if any jobs have EXTERNAL DATASET REQUIREMENTS these would need MANUAL intervention to run (ie. An operator would need to satisfy these requirements with a command)

Examples of these datasets are STEPLIBS, USER CATALOGS, SORTLIBS and PDS libraries which may hold SYSIN data.

In order to avoid this, all external datasets should be made PERManently available.

NORM:

A NORM dataset (default) means that ANY JOB which INPUTS THAT DATASET will automatically have the dataset flagged as a dataset requirement.

NB: As this is the default, any datasets ADDed by LOAD PROCESSING will be flagged as NORM, this includes INTERNAL & EXTERNAL datasets.

PERM:

A PERM dataset (permanently available, means that ALL dependencies on this dataset are ignored.

You can make a dataset PERM by using the JOBCONN, DSN screen or on a system level by using the DSN SCREEN (below).

Command = “DB.6”

---------- CA-7 DATA SET DEFINITION ----------

FUNCTION: (ADD,DELETE,FORMAT,LIST,RENAME,UPD)

DSN: DSNBR:

NEWNAME:

TYPE: GDG:

SMF FEEDBACK REQUIRED: POST AT CLOSE TIME:

DEVICE:

DSORG:

RECFM:

LRECL:

BLKSIZE:

PROGRAM: SM30 MSG-INDX: 00 -- DB.6 -- 99.166 / 11:13:47

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

7 Job Predecessor/Successor:

Job Predecessors/Successors (Dependencies) are used in combination with Scheduling criteria to control job sequencing in CA-7.

When a job is scheduled, be it triggered or Schedule Scan, the job enters the request queue along with a copy of its pre-execution requirements, which can include:-

- Successful completion of a predecessor job/s (Job dependency)
- Creation of a dataset/s (Dataset dependency)
- Free form Text (User Requirement)
- JCL Override (specified on job screen)
- Submit time (specified as part of the scheduling criteria)

The job will not be submitted until all its requirements have been satisfied, manually or automatically, to ensure correct job sequencing. Dependencies are defined by SCHID, and a further qualification called Satisfaction lead-time. To get to the CA7 CPU Job Predecessor panel you can use:

- Topline command – 'JOBCONN,JDEP'
- Topline command – 'DB.3.2'
- Select function 3 from the CA7 Database Maintenance Menu (DBM), and then function 2 from the CA7 Job Predecessor/Successor menu.

---------- CA-7 DATA BASE MAINTENANCE MENU ----------

FUNCTION ===> 3

DATA BASE DEFINITION FOR:

1 - CPU JOB

2 - SCHEDULING

3 - JOB PREDECESSOR/SUCCESSOR

4 - WORKLOAD DOCUMENTATION

5 - INPUT/OUTPUT NETWORK

6 - DATA SET

OTHER FUNCTIONS AVAILABLE:

7 - JCL LIBRARY MAINTENANCE

8 - TEXT EDITOR

9 - CLEAR THE TEXT EDITOR ACTIVE AREA

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.166 / 12:28:11

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 JOB PREDECESSOR/SUCCESSOR MENU ----------

FUNCTION ===> 2

EXECUTION REQUIREMENTS DEFINED BY:

1 - DATA SET PREDECESSORS

2 - CPU JOB PREDECESSORS OR

MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME TIME)

4 - INPUT NETWORK PREDECESSORS OR

OUTPUT NETWORK SUCCESSORS

6 - USER MEMO-FORM PREDECESSORS

7 - REPORT IDS CREATED

PROGRAM: SM60 MSG-INDX: 00 -- DB.3 -- 99.166 / 12:29:13

MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 CPU JOB PREDECESSORS ----------

FUNCTION: (FORMAT,LIST,UPD)
PAGE 0001

PRED FOR JOB: LIST-SCHID:

OPT SCHID LEADTM PRED-JOB NEXT-RUN

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

PROGRAM: SM61 MSG-INDX: 00 --
DB.3.2 -- 99.166 / 12:29:45

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP
LINE

For more detailed information regarding Satisfaction Lead Time, look in the "CA-7 User Guide - version 3.0". This will demonstrate how to use this parameter effectively.

A job can be dependent on any number of other jobs completing beforehand. If the triggering job is the only requirement for the job then NO DEPENDENCY is needed, since the job will not be initiated until the triggering job completes.

7.1 Mutually Exclusive Jobs:

You can define to CA-7 that jobs are not to be run concurrently. These jobs are not dependent on each other, they simply cannot run at the same time (maybe they update the same files). This is also known as negative dependency.

The same screen is used to define a mutually exclusive job as with predecessor. Keep in mind that with MUTUALLY EXCLUSIVE jobs, if one job abends the other will still run.

---------- CA-7 JOB PREDECESSOR/SUCCESSOR MENU ----------

FUNCTION ===> 2

EXECUTION REQUIREMENTS DEFINED BY:

1 - DATA SET PREDECESSORS

2 - CPU JOB PREDECESSORS OR

MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME
TIME)

4 - INPUT NETWORK PREDECESSORS OR

OUTPUT NETWORK SUCCESSORS

6 - USER MEMO-FORM
PREDECESSORS

7 - REPORT IDS CREATED

PROGRAM: SM60 MSG-INDX: 00 --
DB.3 -- 99.166 / 14:11:32

MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 CPU JOB PREDECESSORS ----------

FUNCTION: upd (FORMAT,LIST,UPD) PAGE 0001

PRED FOR JOB: JOB123 LIST-SCHID:

OPT SCHID LEADTM PRED-JOB NEXT-RUN

a 0 0 /JOBXYZ

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

```
PROGRAM: SM61       MSG-INDX:  00     -- DB.3.2     --    99.166  / 14:38:18
MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

In the above example, JOBXYZ has been made mutually exclusive with JOB123. When CA-7 goes to submit this job it will first check to see whether JOB123 is in either the READY or ACTIVE queues. If so, then JOBXYZ will be held back until JOB123 either completes or abends.

Currently, the reverse is not true, if JOBXYZ was running and JOB123 came along it would run, which is why both jobs must be updated, i.e. JOB123 must also be made mutually exclusive to JOBXYZ, as follows:

```
----------------------  CA-7 CPU JOB PREDECESSORS  -------------------------
FUNCTION:  upd       (FORMAT,LIST,UPD)                              PAGE 0001
PRED FOR JOB:  JOBXYZ                          LIST-SCHID:
OPT SCHID  LEADTM          PRED-JOB   NEXT-RUN
 a       0         0                 /JOB123
```

```
OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR
PROGRAM: SM61       MSG-INDX:  00     -- DB.3.2     --    99.166  / 14:38:18
MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

8 Dataset Predecessors:

A job can be dependent on the creation of a dataset/s before being released to run, this is called a dataset predecessor. The standard at M&S is to use (where possible) a JOB PREDECESSOR instead, these are much easier for the operators to track.

For CA-7 to satisfy a dataset predecessor automatically, the datasets must be created by a JOB RUN UNDER CA-7 CONTROL. When a job goes through LOAD PROCESSING, any INPUT DATASETS the job has are automatically flagged as dataset requirements, this includes:

- STEPLIBS
- VSAM CATALOGS
- SORTLIBS
- ETC.

Datasets such as these are NEVER CREATED so these must be made PERManently available using the DSN screen. It is not such a bad idea to make all the datasets PERM (except datasets used to trigger).

To get to the CA-7 Dataset Predecessor panel you can use:

1. Topline command – 'JOBCONN,DSN'
2. Topline command – 'DB.3.1'
3. Topline command – DBM from any panel, then function 3, then function 1 from the CA-7 Job Predecessor/Successor Menu.

```
------------------  CA-7 JOB PREDECESSOR/SUCCESSOR MENU  ------------------
FUNCTION ===>   1



EXECUTION REQUIREMENTS DEFINED BY:
        1  - DATA SET PREDECESSORS
        2  - CPU JOB PREDECESSORS  OR
      MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME TIME)
        4  - INPUT NETWORK PREDECESSORS  OR
      OUTPUT NETWORK SUCCESSORS
        6  - USER MEMO-FORM PREDECESSORS
        7  - REPORT IDS CREATED
```

```
PROGRAM: SM60       MSG-INDX:  00     -- DB.3       --   99.166  / 15:31:44
MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE


         ------------------------  CA-7 DATA SET PREDECESSORS  ------------------------
FUNCTION:  LIST       (FORMAT,LIST,UPD)                              PAGE 0001
PRED FOR JOB:  YSRWCP2                          LIST-SCHID:                  NEXT
OPT SCHID  LEADTM   *--------------- DATASET NAME ---------------*  DSNBR PERM -RUN
         0        0000     SR.YT.PSREORG                          106823   N    YES
         0        0000     SR.YT.SORTOUT                          106824   N    YES
         0        0000     SR.YTST.CMDLIB                         106801   N    YES
```

```
OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR
PROGRAM: SM61       MSG-INDX:  00     -- DB.3.1     --   99.166  / 15:35:21
MESSAGE: LIST FUNCTION SUCCESSFUL
```

Maintaining the datasets is very much like it is for maintaining predecessors, i.e. “D” for delete & “A” for ADD.

9 Date/Time Scheduling (Calendar Scheduling):

In order to schedule jobs by date and time you will use a Base Calendar (for more information see appendices). Once you've selected the appropriate Base Calendar, you must then define what days the job is to be scheduled and what SCHID/s the job is run under on those days.

Finally the last step is CALENDAR RESOLUTION. This process takes your schedule definition and the base calendar specified, and produces a matrix of the exact days the job will be run. CA-7 will scan this matrix when searching for jobs to schedule.

To get to these screens you can use either:

1. Topline command – 'SCHD,JOB'
2. Topline command – 'DB.2.1 (the panel ID)
3. Topline command – 'DBM', then function 2 from the CA-7 Database Maintenance Menu, then function 1 (CPU Job) from the scheduling menu.

```
---------- CA-7 DATA BASE MAINTENANCE MENU ----------
FUNCTION ===>          2


DATA BASE DEFINITION FOR:
        1       - CPU JOB
        2       - SCHEDULING
        3       - JOB PREDECESSOR/SUCCESSOR
        4       - WORKLOAD DOCUMENTATION
        5       - INPUT/OUTPUT NETWORK
        6       - DATA SET

OTHER FUNCTIONS AVAILABLE:
        7       - JCL LIBRARY MAINTENANCE
        8       - TEXT EDITOR
        9       - CLEAR THE TEXT EDITOR ACTIVE AREA
```

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.167 / 10:01:25

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 SCHEDULING MENU ----------

FUNCTION ===> 1

DATE/TIME SCHEDULING FOR:

1 - CPU JOB

2 - INPUT NETWORK

3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:

4 - JOB TRIGGERING OTHER CPU JOB(S)

5 - INPUT NETWORK TRIGGERING CPU JOB(S)

6 - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:

7 - MODIFICATION TO RESOLVED SCHEDULE DATES

8 - BASE CALENDAR MAINTENANCE

```
        PROGRAM: SM70                          MSG-INDX:     00                    --
DB.2            --   99.167              / 10:03:00

        MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP
LINE


        ------------------------  CA-7 CPU JOB SCHEDULING  -------------------------

        FUNCTION:     EDIT
        (CLEAR,DELETE,EDIT,FE,FETCH,REPL,RESOLV,SAVE)


        JOB:     H5KPTEST



        SCAL:  05         (DEFAULT SCAL ID FOR ADDS)




        SCHID-COUNT:                  000
```

```
        PROGRAM: SM71                          MSG-INDX:     00                    --
DB.2.1          --   99.167              / 10:03:41

        MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

In this example, we're creating a NEW schedule (edit) for job H5KPTEST and will use SCALyy05 (05) Base Calendar. If the schedule already existed and I wanted to change it I would use the 'FE' function instead of EDIT. When you "fetch" a schedule, however, you don't need to specify the Base Calendar, as this information is stored in the database.

```
------------------  CA-7 CPU JOB SCHEDULING PARAMETER EDIT  ------------------

FUNCTION:          (ADD,DELETE,EXIT,FORMAT,LIST,REPL,SAVE,SR,SS)
```

JOB: H5KPTEST SCHID: SCAL: ROLL: INDEX:

DOTM LDTM SBTM

__ __ DAILY

__ __ WEEKLY SUN: MON: TUE:WED: THU: FRI: SAT:

__ __ MONTHLY JAN: FEB: MAR: APR: MAY: JUN:

JUL: AUG: SEP: OCT: NOV: DEC:

WEEK: DAY-OF-WEEK:

RDAY:

__ __ ANNUAL DAY:

DEFAULT SCAL: 05

__ __ SYMETRIC START: SPAN: SCHID-COUNT: 000

PROGRAM: SM72 MSG-INDX: 00 -- DB.2.1-E -- 99.167 / 10:21:05

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

The screen above looks a lot more complicated than it actually is, however, I would suggest that when date/time scheduling you refer to the "CA-7 User Guide – version 3.0". The main reason being that it requires a bit more in depth knowledge of CA-7 (reg: SCHIDS, INDEXES, DUE OUT TIMES, etc), but is still quite straight forward to understand and apply.

This also applies to Calendar Resolution.

9.1 MODIFICATION TO RESOLVED SCHEDULE DATES

Due to the constraints of the scanning screens, you may not always be able to schedule a job on exactly the right date. This will depend on the requirements of the job/s.

For example, a job needs to be scheduled on the third Tuesday of every month. However, only if there has been 3 Fridays beforehand in that month. Ultimately, this means that potentially you could schedule the job to run monthly on the 3rd week of the month on a Tuesday, but you may have inconsistencies in the scheduling. So in this example, you'd have to move the week back 1 further to accommodate for the extra Friday. Modifying a resolved schedule manually does this.

(see next page)

To get to the screen which does this, Type DB.2 (the Scheduling menu)

```
---------------------------  CA-7 SCHEDULING MENU  ---------------------------
FUNCTION ===>


DATE/TIME SCHEDULING FOR:
        1 - CPU JOB
        2 - INPUT NETWORK
        3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:
        4 - JOB TRIGGERING OTHER CPU JOB(S)
        5 - INPUT NETWORK TRIGGERING CPU JOB(S)
        6 - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:
        7 - MODIFICATION TO RESOLVED SCHEDULE DATES
        8 - BASE CALENDAR MAINTENANCE



PROGRAM: SM70   MSG-INDX: 00   -- DB.2   --   01.254 / 11:24:45
MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

Option 7 is the one you need

```
        ---------------  CA-7 MODIFICATION TO RESOLVED SCHEDULE DATES  ---------------
        FUNCTION:   LIST                (FORMAT,LIST,UPD)

        JOB:    PGDDUMMY                        NETWORK:
        MODSTAT:
        SCHID:          101                                     YEAR:           2001
                                    1               1       2               2       3       3
```

. . . . 5. . . . 0 . . . . 5. . . . 0 . . . . 5. . . .0 1

JUL 0000000000 0000000000 0000000000 0

AUG 0000000000 0000000000 0000000000 0

SEP 0000000000 0000000000 0000000000

OCT 0000000000 0000000000 0000000000 0

NOV 0000000000 0000000000 0000000000

DEC 0000000000 0000000000 0000000000 0

JAN 0000000000 0000100000 0000000000 0

FEB 0000000000 0000000000 00000000

MAR 0000000000 0000000000 0000000000 0

APR 0000000000 0000000000 0000000000

MAY 0000000000 0000000000 0000000000 0

JUN 0000000000 0000000000 0000000000

1 CA-7 LOGON/LOGOFF:

OPTION UCC7

----------*** M&S CA7 (3.2) HC01 ***----------

PLEASE ENTER LOGON DATA OR PRESS PF3 TO DISCONNECT

CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97

USERID : DSR013 TERMINAL NAME : VTM002 DATE : 99.166

PASSWORD : VTAM APPLID : UCC7 TIME : 16:05:53

NEW PASSWORD : LUNAME : A20MT267 LEVEL : V3L2 (9802)

UID RESOURCE :

PARMS :

```
          CCCCCCCCCCC          AAAAAAAAAA          77777777777
          CCCCCCCCCCC   AAAAAAAAAA          77777777777
          CCC                  AAA          AAA                  7777
          CCC                  AAAAAAAAAA        0000    7777
          CCC                  AAAAAAAAAA        0000    7777
          CCC                  AAA          AAA                  7777
          CCCCCCCCCCC  AAA          AAA                  7777
          CCCCCCCCCCC AAA          AAA                  7777

                        COPYRIGHT (C) 1988, 1996
              COMPUTER ASSOCIATES INTERNATIONAL, INC.
MENU
          ---------------------------*** M&S CA7 (3.2) HC01 ***-------------------------

CA-7.023 LOGON ACCEPTED, PRESS ENTER FOR MENU OR ENTER COMMAND
CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97


USERID      :  DSR013     TERMINAL NAME : VTM002          DATE  : 99.166
                        VTAM APPLID   : UCC7          TIME  : 16:09:44
                        LUNAME        : A20MT267     LEVEL : V3L2 (9802)


          CCCCCCCCCCC          AAAAAAAAAA          77777777777
               CCCCCCCCCCC              AAAAAAAAAA          77777777777
          CCC                       AAA              AAA                       7777
          CCC                            AAAAAAAAAA   0000        7777
          CCC                       AAAAAAAAAA   0000    7777
          CCC                       AAA         AAA             7777
          CCCCCCCCCCC       AAA             AAA             7777
          CCCCCCCCCCC       AAA             AAA             7777

                        COPYRIGHT (C) 1988, 1996
              COMPUTER ASSOCIATES INTERNATIONAL, INC.
```

LOGON IS COMPLETE!!!!

To LOGOFF:

Topline command – "/logoff"

/logoff

```
 ------------------------  CA-7 CPU JOB DEFINITION  -------------------------
 FUNCTION:  LIST       (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)
 JOB:  YSRWCP2
 GENERAL:       SYSTEM:          JOBNET:          OWNER:  DSR000     UID:  0

 JCL:               ID:  145   MEMBER:  YSRWCP2          RELOAD:  N   EXEC:  Y   RETAIN-JCL:  N

          LIB:
 REQUIREMENTS: HOLD:  N   JCL-OVRD:  N   USE-OVRD-LIB:  N   VERIFY:  N   MAINT:  N

          SATISFACTION LEAD-TIME:  JOB:  0   DSN:  0    ARFSET:

 EXECUTION:   MAINID:  SY1    INSERT-RMS:  N   COND-CODE:  0      RO:  NE
          DONT SCHEDULE -- BEFORE:  00000  0000   AFTER:  99999  0000

 MESSAGES:    LTERM:  MASTER     REQUIREMENT-LIST:  Y   PROMPTS:  N
          ERROR MSGS -- RQMTS NOT USED:  Y   DSN NOT FOUND:  Y

 RESOURCES:   REGION:  960    CLOCK-TIME:  0004   CPU-TIME:  00004
          CLASS:  A   PRTY:  000            MSGCLASS:  Q
          TAPE DRIVES...TYPE1:  000  M  000  C   TYPE2:  000  M  000  C

 PROGRAM: SM20       MSG-INDX:  00     -- DB.1       --   99.166  / 16:14:47
 MESSAGE: LIST SUCCESSFUL

          ---------------------------*** M&S CA7 (3.2) HC01 ***-------------------------
```

CA-7.024 /LOGOFF SUCCESSFUL

CA-7 REL 3.2 WAS RELEASED TO HC01 ON 03/08/97

USERID : TERMINAL NAME : VTM002 DATE : 99.166

PASSWORD : VTAM APPLID : UCC7 TIME : 16:16:14

NEW PASSWORD : LUNAME : A20MT267 LEVEL : V3L2 (9802)

UID RESOURCE :

PARMS :

```
          CCCCCCCCCCC  AAAAAAAAAA       77777777777
        CCCCCCCCCCC  AAAAAAAAAA         77777777777
          CCC                AAA          AAA           7777
          CCC                AAAAAAAAAA   0000      7777
          CCC                AAAAAAAAAA   0000      7777
          CCC                AAA          AAA           7777
     CCCCCCCCCCC  AAA       AAA           7777
     CCCCCCCCCCC  AAA       AAA           7777
```


2 Commonly used Commands:

Command	Purpose	Notes
LJOB,JOB=*******	Listing of job information.	
LPRRN,JOB=*******	Listing of last successful run	
XQJ	Gives list of jobs in queue	
LRDY	Lists jobs awaiting execution	
CANCEL,JOB=Y****	Cancels job off the queue	
/LOGON & /LOGOFF	Logs on and off CA-7.	
HELP	Gives help on commands, syntax, etc.	Once HELP has been typed, user should then type Þ Y and 1 to allow access to the correct screen.
DEMAND(H),JOB=Y***	Demands (hold[H] is optional) job into CA7. If [H] is used then it	Should be used in conjuction with SCHID=0xx if job is to be run on a particular day.

	will wait in the XQJ screen until released.	

2.1 Other Useful Commands:

Command	Purpose	Notes
/DISPLAY,Q=ALL	Shows information on the queue.	
…LIST=ALL …LIST=NODD …LIST=TRIG …LIST=SID***	Shows everything for that job Shows everything except DD Shows trigger information only Shows triggers under 1 schedule ID only	Format: LJOB,JOB=PID****,LIST=NODD
LSCHD,JOB=DID****	Lists every job on the database with a summary of schedule information.	Can also add Status, so ST=EXP (expired schedules)
FSTRUC,SCHID=***, JOB=*******	Gives the order of triggered jobs under a given structure.	Please note that there can be more than one schedule ID for each job and for each day.
LRLOG	Details of previous runs since midnight	Add date=* which gives the last five days worth. Can also find out which jobs ran late or were cancelled by using ST=LATE/CANC
LJCL,JOB=Y****	Lists JCL deck to be used by job=”x”, regardless of whether it’s in the queue (XQJ).	
LISTDIR,DSN=library, MEM=member	Lists members of PDS	
LQ/LQUE	Lists queue information	Can add Status, eg ST=HELD,LATE,SUBM,ABND Generally displays information about all jobs that are on the CA-7 queue including the current status of the jobs.

LIST	Lists jobs which have fallen over	
/DISPLAY,ST=JCL	Listing of all JCLID's and their associated library.	
LJES	Lists jobs that have been sent to JES	
HOLD,JOB=Y****	Holds job in CA-7 queue (XQJ)	
LQP,JOB=Y*****	Lists job information from the Request and LRDY queues	Displays the current status of the job.This command shows you why a job may not be executing
POST,JOB=Y*****	Satisfies requirements for jobs.	Command followed by type of requirement to be met. IE. DSN=xx.xxxx.xxxxx or JOB=*******.
REQUEUE,JOB=Y****	Puts job back in XQJ when it's sitting in LRDY or LJES queues.	
SUBTM,JOB=Y*****	Allows you to make your job run at a particular time once already on the XQJ queue.	Followed by TIME=hhmm
/PROF(S)	Lists and updates CA-7 user profiles.	

3 Resources & Profiles:

As part of it's security mechanism for jobs, CA7 uses userId resources and has profiles that can be set to allow access to those resources. This security is used to restrict access to jobs from users that do not have authority for the necessary profile.

Each of the systems have a userId (UID) resource set (e.g. UID = 158) for the majority of it's jobs so that they can only be browsed, updated or demanded by authorized users. Those jobs that interface or relate to another application, and hence require more open security to allow that application access to the jobs, have their UID set to 000 effectively having no security.

In order to access jobs with a non-zero UID the user must have RACF access to the relevant profile. As authority to multiple profiles is possible the user must also change the 'active' profile for viewing different applications. This can be done in UCC7 by entering the command: -

/PROF,R=CA7NNNN where NNNN is the UID number for the required application

Note: Once a resource has been 'activated', for a userId, it must be specified every time when logging on to UCC7, until such time as it is reset or changed – it is entered on the UCC7 logon panel in the UID resource field as CA7NNNN, where NNNN is the UID last activated.

An active resource can be reset by entering the /PROF,R=CA7NNNN command, replacing NNNN with zeros (i.e. UID = 0000). This will mean that the userId no longer has an active profile and hence does not need to specify that resource at logon.

Important: If a list of all jobs for an application is requested in CA7, but no resource (or the relevant resource) for that user is active, those jobs with a non-zero UID will not appear. More importantly, CA7 will provide no information that any jobs are missing from the listing. In effect, if the relevant resource for an application is not active, no information on 'secure', non-zero UID jobs, will be provided.

4Triggering:

A trigger is a form of scheduling and is by far the most economical, efficient method to schedule jobs to run under CA-7 control. In an ideal situation, the very first job in a SYSTEM should always be scheduled by date/time…

There are two forms of triggering:

- COMPLETION of a job (job triggering)
- CREATION of a dataset (dataset triggering)

NOTE The Marks & Spencer standard specified that dataset triggers should only be used where absolutely necessary, for recovery work or to trigger a job based on a Return Code from a particular step!

Triggers are controlled by Schedule ID's. Whatever SCHID the job doing the trigger or creating the dataset is using will be propagated to any triggered job. This is true in all cases except when TRIGID is specified.

The following is an example of a typical use of TRIGID:

The "BACKUP" job runs twice in this sequence, it's the same job both times because remember that triggered jobs propagate their SCHID to following jobs, this is where a TRIGID is very useful, without it this sequence would LOOP.

BACKUP runs using SCHID = 1, under this ID it triggers UPDATE.

↓

UPDATE assumes SCHID = 1 from BACKUP, under this SCHID triggers REPORT.

↓

REPORT assumes SCHID = 1 from UPDATE, under this SCHID triggers BACKUP.

↓

BACKUP assumes SCHID = 1 from REPORT, under this SCHID triggers UPDATE.

UPDATE triggers REPORT…and so on.

To avoid this LOOP a TRIGID can be used. When REPORT triggers BACKUP it uses a TRIGID of 99.

BACKUP runs using SCHID = 1, under this ID it triggers UPDATE.

↓

UPDATE assumes SCHID = 1 from BACKUP, under this SCHID triggers REPORT.

↓

REPORT assumes SCHID = 1 from UPDATE, under this SCHID triggers BACKUP with a TRIGID of 99.

↓

BACKUP runs using SCHID = 99, under this SCHID it triggers nothing.

4.1 Getting to the JOB TRIGGERING screens:

The methods by which you can get to the CA-7 Job Triggering screens are:

1. Topline command – 'SCHD.JTRG'
2. Topline command – 'DB.2.4'
3. Select function 2 from the Data Base Maintenance Menu, then function 4.

```
---------------------  CA-7 DATA BASE MAINTENANCE MENU  ----------------------
FUNCTION ===>  2

DATA BASE DEFINITION FOR:
  1  - CPU JOB
  2  - SCHEDULING
  3  - JOB PREDECESSOR/SUCCESSOR
  4  - WORKLOAD DOCUMENTATION
  5  - INPUT/OUTPUT NETWORK
  6  - DATA SET

OTHER FUNCTIONS AVAILABLE:
  7  - JCL LIBRARY MAINTENANCE
```

8 - TEXT EDITOR

9 - CLEAR THE TEXT EDITOR ACTIVE AREA

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.166 / 10:17:37

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 SCHEDULING MENU ----------

FUNCTION ===> 4

DATE/TIME SCHEDULING FOR:

1 - CPU JOB

2 - INPUT NETWORK

3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:

4 - JOB TRIGGERING OTHER CPU JOB(S)

5 - INPUT NETWORK TRIGGERING CPU JOB(S)

6 - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:

7 - MODIFICATION TO RESOLVED SCHEDULE DATES

8 - BASE CALENDAR MAINTENANCE

PROGRAM: SM70 MSG-INDX: 00 -- DB.2 -- 99.166 / 10:25:23

MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 JOB TRIGGERING ----------

```
FUNCTION:  LIST       (FORMAT,LIST,UPD)                          PAGE 0001
JOB:   YSRWCP2
OPT SCHID TRGD-JOB TRGID  DOTM  QTM   LDTM  SBTM *---- EXCEPTIONS ----*
          000   YSRWCP3                         0010    0010
```

```
OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR
PROGRAM: SM75       MSG-INDX:  00     -- DB.2.4     --   99.166  / 10:27:06
MESSAGE: LIST FUNCTION SUCCESSFUL
         END OF DATA REACHED
```

When wanting to change or add a trigger, under the “OPT” field, you have the option of placing an “A” or a “D” (ADD & DELETE respectively) on the respective line. So if you wanted to change the trigger from YSRWCP2 → YSRWCP3 to YSRWCP2 → YSRWCP4, for example, you would do the following:

```
--------------------------  CA-7 JOB TRIGGERING  ---------------------------
FUNCTION:  upd        (FORMAT,LIST,UPD)                          PAGE 0001
JOB:   YSRWCP2
OPT SCHID TRGD-JOB TRGID  DOTM  QTM   LDTM  SBTM *---- EXCEPTIONS ----*
 d       000     YSRWCP3                       0010   0010
 a       000     YSRWCP4                       0010   0010
```

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

PROGRAM: SM75 MSG-INDX: 00 -- DB.2.4 -- 99.166 / 11:46:37

MESSAGE: LIST FUNCTION SUCCESSFUL

END OF DATA REACHED

5 CPU Job Definition:

Each job to be controlled by CA-7 must first be defined in its database, the easiest method to do this is to "ADD" the job using the JOB SCREEN, Panel "DB.1" or just use the Topline command "JOB".

---------- CA-7 CPU JOB DEFINITION ----------

FUNCTION: (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)

JOB:

GENERAL: SYSTEM: JOBNET: OWNER: UID:

JCL: ID: MEMBER: RELOAD: EXEC: RETAIN-JCL:

LIB:

REQUIREMENTS: HOLD: JCL-OVRD: USE-OVRD-LIB: VERIFY: MAINT:

SATISFACTION LEAD-TIME: JOB: DSN: ARFSET:

EXECUTION: MAINID: INSERT-RMS: COND-CODE: RO:

DONT SCHEDULE -- BEFORE: AFTER:

MESSAGES: LTERM: REQUIREMENT-LIST: PROMPTS:
ERROR MSGS -- RQMTS NOT USED: DSN NOT FOUND:

RESOURCES: REGION: CLOCK-TIME: CPU-TIME:
CLASS: PRTY: MSGCLASS:
TAPE DRIVES...TYPE1: M C TYPE2: M C

PROGRAM: MSG-INDX: 00 -- DB.1 -- 99.166 / 10:56:47
MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 CPU JOB DEFINITION ----------
FUNCTION: LIST (ADD,DELETE,DD,DELPRRN,FORMAT,LIST,UPD)
JOB: YSRWCP2
GENERAL: SYSTEM: JOBNET: OWNER: DSR000 UID: 0

JCL: ID: 145 MEMBER: YSRWCP2 RELOAD: N EXEC: Y RETAIN-JCL: N

LIB:
REQUIREMENTS: HOLD: N JCL-OVRD: N USE-OVRD-LIB: N VERIFY: N MAINT: N
SATISFACTION LEAD-TIME: JOB: 0 DSN: 0 ARFSET:

EXECUTION: MAINID: SY1 INSERT-RMS: N COND-CODE: 0 RO: NE
DONT SCHEDULE -- BEFORE: 00000 0000 AFTER: 99999 0000

MESSAGES: LTERM: MASTER REQUIREMENT-LIST: Y PROMPTS: N
ERROR MSGS -- RQMTS NOT USED: Y DSN NOT FOUND: Y

RESOURCES: REGION: 960 CLOCK-TIME: 0004 CPU-TIME: 00004
CLASS: A PRTY: 000 MSGCLASS: Q
TAPE DRIVES...TYPE1: 000 M 000 C TYPE2: 000 M 000 C

PROGRAM: SM20 MSG-INDX: 00 -- DB.1 -- 99.166 / 11:01:09

MESSAGE: LIST SUCCESSFUL

A brief description of the Functions and Fields on this screen can be found in the "CA-7 User Guide – Version 3.0" (see Zak Broome-Levett or Ken Stowers for its location).

6 Dataset Definition:

CA-7 keeps information on its database on ALL DATASETS used by jobs run under its control. Dataset information can either be added manually using the DSN SCREEN, pnael "DB.6", or automatically through LOAD PROCESSING (CA-7 recognises NEW Datasets).

---------- CA-7 DATA SET DEFINITION ----------

FUNCTION: (ADD,DELETE,FORMAT,LIST,RENAME,UPD)

DSN:
DSNBR:

NEWNAME:

TYPE: GDG:

SMF FEEDBACK REQUIRED: POST AT CLOSE TIME:

DEVICE:

DSORG:

RECFM:

LRECL:

BLKSIZE:

PROGRAM: SM30 MSG-INDX: 00 -- DB.6 -- 99.166 / 11:13:47

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

6.1 Internal Datasets:

These are datasets which are created by a CA-7 controlled job (DISP=NEW). As the job runs it generates SMF information on the datasets it uses, hence CA-7 can keep track of when each dataset is created and AUTOMATICALLY satisfy dataset dependencies and triggers.

6.2 External Datasets:

These are datasets that are not created by a CA-7 controlled job and for which no SMF information is received. This being the case, CA-7 cannot satisfy any dependencies on these datasets, hence, if any jobs have EXTERNAL DATASET REQUIREMENTS these would need MANUAL intervention to run (ie. An operator would need to satisfy these requirements with a command)

Examples of these datasets are STEPLIBS, USER CATALOGS, SORTLIBS and PDS libraries which may hold SYSIN data.

In order to avoid this, all external datasets should be made PERManently available.

NORM:

A NORM dataset (default) means that ANY JOB which INPUTS THAT DATASET will automatically have the dataset flagged as a dataset requirement.

NB: As this is the default, any datasets ADDed by LOAD PROCESSING will be flagged as NORM, this includes INTERNAL & EXTERNAL datasets.

PERM:

A PERM dataset (permanently available, means that ALL dependencies on this dataset are ignored.

You can make a dataset PERM by using the JOBCONN, DSN screen or on a system level by using the DSN SCREEN (below).

Command = “DB.6”

---------- CA-7 DATA SET DEFINITION ----------

FUNCTION: (ADD,DELETE,FORMAT,LIST,RENAME,UPD)

DSN: DSNBR:

NEWNAME:

TYPE: GDG:

SMF FEEDBACK REQUIRED: POST AT CLOSE TIME:

DEVICE:

DSORG:

RECFM:

LRECL:

BLKSIZE:

PROGRAM: SM30 MSG-INDX: 00 -- DB.6 -- 99.166 / 11:13:47

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

7 Job Predecessor/Successor:

Job Predecessors/Successors (Dependencies) are used in combination with Scheduling criteria to control job sequencing in CA-7.

When a job is scheduled, be it triggered or Schedule Scan, the job enters the request queue along with a copy of its pre-execution requirements, which can include:-

- Successful completion of a predecessor job/s (Job dependency)
- Creation of a dataset/s (Dataset dependency)
- Free form Text (User Requirement)
- JCL Override (specified on job screen)
- Submit time (specified as part of the scheduling criteria)

The job will not be submitted until all its requirements have been satisfied, manually or automatically, to ensure correct job sequencing. Dependencies are defined by SCHID, and a further qualification called Satisfaction lead-time. To get to the CA7 CPU Job Predecessor panel you can use:

- Topline command – 'JOBCONN,JDEP'
- Topline command – 'DB.3.2'
- Select function 3 from the CA7 Database Maintenance Menu (DBM), and then function 2 from the CA7 Job Predecessor/Successor menu.

---------- CA-7 DATA BASE MAINTENANCE MENU ----------

FUNCTION ===> 3

DATA BASE DEFINITION FOR:

1 - CPU JOB

2 - SCHEDULING

3 - JOB PREDECESSOR/SUCCESSOR

4 - WORKLOAD DOCUMENTATION

5 - INPUT/OUTPUT NETWORK

6 - DATA SET

OTHER FUNCTIONS AVAILABLE:

7 - JCL LIBRARY MAINTENANCE

8 - TEXT EDITOR

9 - CLEAR THE TEXT EDITOR ACTIVE AREA

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.166 / 12:28:11

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 JOB PREDECESSOR/SUCCESSOR MENU ----------

FUNCTION ===> 2

EXECUTION REQUIREMENTS DEFINED BY:

1 - DATA SET PREDECESSORS

2 - CPU JOB PREDECESSORS OR

MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME TIME)

4 - INPUT NETWORK PREDECESSORS OR

OUTPUT NETWORK SUCCESSORS

6 - USER MEMO-FORM PREDECESSORS

7 - REPORT IDS CREATED

PROGRAM: SM60 MSG-INDX: 00 -- DB.3 -- 99.166 / 12:29:13

MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 CPU JOB PREDECESSORS ----------

FUNCTION: (FORMAT,LIST,UPD)
PAGE 0001

PRED FOR JOB: LIST-SCHID:

OPT SCHID LEADTM PRED-JOB NEXT-RUN

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

PROGRAM: SM61 MSG-INDX: 00 --
DB.3.2 -- 99.166 / 12:29:45

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP
LINE

For more detailed information regarding Satisfaction Lead Time, look in the "CA-7 User Guide - version 3.0". This will demonstrate how to use this parameter effectively.

A job can be dependent on any number of other jobs completing beforehand. If the triggering job is the only requirement for the job then NO DEPENDENCY is needed, since the job will not be initiated until the triggering job completes.

7.1 Mutually Exclusive Jobs:

You can define to CA-7 that jobs are not to be run concurrently. These jobs are not dependent on each other, they simply cannot run at the same time (maybe they update the same files). This is also known as negative dependency.

The same screen is used to define a mutually exclusive job as with predecessor. Keep in mind that with MUTUALLY EXCLUSIVE jobs, if one job abends the other will still run.

---------- CA-7 JOB PREDECESSOR/SUCCESSOR MENU ----------

FUNCTION ===> 2

EXECUTION REQUIREMENTS DEFINED BY:

1 - DATA SET PREDECESSORS

2 - CPU JOB PREDECESSORS OR

MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME
TIME)

4 - INPUT NETWORK PREDECESSORS OR

OUTPUT NETWORK SUCCESSORS

6 - USER MEMO-FORM
PREDECESSORS

7 - REPORT IDS CREATED

PROGRAM: SM60 MSG-INDX: 00 --
DB.3 -- 99.166 / 14:11:32

MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 CPU JOB PREDECESSORS ----------

FUNCTION: upd (FORMAT,LIST,UPD) PAGE 0001

PRED FOR JOB: JOB123 LIST-SCHID:

OPT SCHID LEADTM PRED-JOB NEXT-RUN

a 0 0 /JOBXYZ

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

```
PROGRAM: SM61       MSG-INDX:  00     -- DB.3.2     --    99.166  / 14:38:18
MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

In the above example, JOBXYZ has been made mutually exclusive with JOB123. When CA-7 goes to submit this job it will first check to see whether JOB123 is in either the READY or ACTIVE queues. If so, then JOBXYZ will be held back until JOB123 either completes or abends.

Currently, the reverse is not true, if JOBXYZ was running and JOB123 came along it would run, which is why both jobs must be updated, i.e. JOB123 must also be made mutually exclusive to JOBXYZ, as follows:

```
----------------------  CA-7 CPU JOB PREDECESSORS  -------------------------
FUNCTION:  upd       (FORMAT,LIST,UPD)                              PAGE 0001
PRED FOR JOB:  JOBXYZ                          LIST-SCHID:
OPT SCHID  LEADTM          PRED-JOB   NEXT-RUN
 a       0         0                 /JOB123
```

```
OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR
PROGRAM: SM61       MSG-INDX:  00     -- DB.3.2     --    99.166  / 14:38:18
MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE
```

8 Dataset Predecessors:

A job can be dependent on the creation of a dataset/s before being released to run, this is called a dataset predecessor. The standard at M&S is to use (where possible) a JOB PREDECESSOR instead, these are much easier for the operators to track.

For CA-7 to satisfy a dataset predecessor automatically, the datasets must be created by a JOB RUN UNDER CA-7 CONTROL. When a job goes through LOAD PROCESSING, any INPUT DATASETS the job has are automatically flagged as dataset requirements, this includes:

- STEPLIBS
- VSAM CATALOGS
- SORTLIBS
- ETC.

Datasets such as these are NEVER CREATED so these must be made PERManently available using the DSN screen. It is not such a bad idea to make all the datasets PERM (except datasets used to trigger).

To get to the CA-7 Dataset Predecessor panel you can use:

1. Topline command – 'JOBCONN,DSN'
2. Topline command – 'DB.3.1'
3. Topline command – DBM from any panel, then function 3, then function 1 from the CA-7 Job Predecessor/Successor Menu.

```
------------------  CA-7 JOB PREDECESSOR/SUCCESSOR MENU  ------------------
FUNCTION ===>  1



EXECUTION REQUIREMENTS DEFINED BY:
        1  - DATA SET PREDECESSORS
        2  - CPU JOB PREDECESSORS  OR
      MUTUALLY EXCLUSIVE JOBS (CAN NOT RUN AT SAME TIME)
        4  - INPUT NETWORK PREDECESSORS  OR
      OUTPUT NETWORK SUCCESSORS
        6  - USER MEMO-FORM PREDECESSORS
        7  - REPORT IDS CREATED
```

PROGRAM: SM60 MSG-INDX: 00 -- DB.3 -- 99.166 / 15:31:44

MESSAGE: SPECIFY OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 DATA SET PREDECESSORS ----------

FUNCTION: LIST (FORMAT,LIST,UPD) PAGE 0001

PRED FOR JOB: YSRWCP2 LIST-SCHID: NEXT

OPT	SCHID	LEADTM	DATASET NAME	DSNBR	PERM	-RUN
	0	0000	SR.YT.PSREORG	106823	N	YES
	0	0000	SR.YT.SORTOUT	106824	N	YES
	0	0000	SR.YTST.CMDLIB	106801	N	YES

OPTIONS: A=ADD,D=DELETE,U=UPDATE,*=PROCESSED,?=ERROR

PROGRAM: SM61 MSG-INDX: 00 -- DB.3.1 -- 99.166 / 15:35:21

MESSAGE: LIST FUNCTION SUCCESSFUL

Maintaining the datasets is very much like it is for maintaining predecessors, i.e. “D” for delete & “A” for ADD.

9 Date/Time Scheduling (Calendar Scheduling):

In order to schedule jobs by date and time you will use a Base Calendar (for more information see appendices). Once you've selected the appropriate Base Calendar, you must then define what days the job is to be scheduled and what SCHID/s the job is run under on those days.

Finally the last step is CALENDAR RESOLUTION. This process takes your schedule definition and the base calendar specified, and produces a matrix of the exact days the job will be run. CA-7 will scan this matrix when searching for jobs to schedule.

To get to these screens you can use either:

1. Topline command – 'SCHD,JOB'
2. Topline command – 'DB.2.1 (the panel ID)
3. Topline command – 'DBM', then function 2 from the CA-7 Database Maintenance Menu, then function 1 (CPU Job) from the scheduling menu.

```
---------- CA-7 DATA BASE MAINTENANCE MENU ----------
FUNCTION ===>          2


DATA BASE DEFINITION FOR:
        1       - CPU JOB
        2       - SCHEDULING
        3       - JOB PREDECESSOR/SUCCESSOR
        4       - WORKLOAD DOCUMENTATION
        5       - INPUT/OUTPUT NETWORK
        6       - DATA SET

OTHER FUNCTIONS AVAILABLE:
        7       - JCL LIBRARY MAINTENANCE
        8       - TEXT EDITOR
        9       - CLEAR THE TEXT EDITOR ACTIVE AREA
```

ACTIVE AREA NOW CONTAINS 0000 LINES OF TEXT

PROGRAM: SDM0 MSG-INDX: 00 -- DB -- 99.167 / 10:01:25

MESSAGE: SPECIFY DESIRED OPTION OR ENTER A COMMAND ON THE TOP LINE

---------- CA-7 SCHEDULING MENU ----------

FUNCTION ===> 1

DATE/TIME SCHEDULING FOR:

1 - CPU JOB

2 - INPUT NETWORK

3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:

4 - JOB TRIGGERING OTHER CPU JOB(S)

5 - INPUT NETWORK TRIGGERING CPU JOB(S)

6 - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:

7 - MODIFICATION TO RESOLVED SCHEDULE DATES

8 - BASE CALENDAR MAINTENANCE

PROGRAM: SM70 MSG-INDX: 00 --
DB.2 -- 99.167 / 10:03:00

MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP
LINE

---------- CA-7 CPU JOB SCHEDULING ----------

FUNCTION: EDIT
(CLEAR,DELETE,EDIT,FE,FETCH,REPL,RESOLV,SAVE)

JOB: H5KPTEST

SCAL: 05 (DEFAULT SCAL ID FOR ADDS)

SCHID-COUNT: 000

PROGRAM: SM71 MSG-INDX: 00 --
DB.2.1 -- 99.167 / 10:03:41

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

In this example, we're creating a NEW schedule (edit) for job H5KPTEST and will use SCALyy05 (05) Base Calendar. If the schedule already existed and I wanted to change it I would use the 'FE' function instead of EDIT. When you "fetch" a schedule, however, you don't need to specify the Base Calendar, as this information is stored in the database.

---------- CA-7 CPU JOB SCHEDULING PARAMETER EDIT ----------

FUNCTION: (ADD,DELETE,EXIT,FORMAT,LIST,REPL,SAVE,SR,SS)

JOB: H5KPTEST SCHID: SCAL: ROLL: INDEX:

DOTM LDTM SBTM

__ __ DAILY

__ __ WEEKLY SUN: MON: TUE:WED: THU: FRI: SAT:

__ __ MONTHLY JAN: FEB: MAR: APR: MAY: JUN:
JUL: AUG: SEP: OCT: NOV: DEC:
WEEK: DAY-OF-WEEK:
RDAY:

__ __ ANNUAL DAY:
DEFAULT SCAL: 05

__ __ SYMETRIC START: SPAN: SCHID-COUNT: 000

PROGRAM: SM72 MSG-INDX: 00 -- DB.2.1-E -- 99.167 / 10:21:05

MESSAGE: ENTER FUNCTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

The screen above looks a lot more complicated than it actually is, however, I would suggest that when date/time scheduling you refer to the "CA-7 User Guide – version 3.0". The main reason being that it requires a bit more in depth knowledge of CA-7 (reg: SCHIDS, INDEXES, DUE OUT TIMES, etc), but is still quite straight forward to understand and apply.

This also applies to Calendar Resolution.

9.1 MODIFICATION TO RESOLVED SCHEDULE DATES

Due to the constraints of the scanning screens, you may not always be able to schedule a job on exactly the right date. This will depend on the requirements of the job/s.

For example, a job needs to be scheduled on the third Tuesday of every month. However, only if there has been 3 Fridays beforehand in that month. Ultimately, this means that potentially you could schedule the job to run monthly on the 3rd week of the month on a Tuesday, but you may have inconsistencies in the scheduling. So in this example, you'd have to move the week back 1 further to accommodate for the extra Friday. Modifying a resolved schedule manually does this.

(see next page)

To get to the screen which does this, Type DB.2 (the Scheduling menu)

---------- CA-7 SCHEDULING MENU ----------

FUNCTION ===>

DATE/TIME SCHEDULING FOR:

1 - CPU JOB

2 - INPUT NETWORK

3 - OUTPUT NETWORK

TRIGGER SCHEDULING FOR:

4 - JOB TRIGGERING OTHER CPU JOB(S)

5 - INPUT NETWORK TRIGGERING CPU JOB(S)

6 - DATA SET TRIGGERING CPU JOB(S)

OTHER FUNCTIONS AVAILABLE:

7 - MODIFICATION TO RESOLVED SCHEDULE DATES

8 - BASE CALENDAR MAINTENANCE

PROGRAM: SM70 MSG-INDX: 00 -- DB.2 -- 01.254 / 11:24:45

MESSAGE: ENTER OPTION, TRANSFER OR ENTER A COMMAND ON THE TOP LINE

Option 7 is the one you need

---------- CA-7 MODIFICATION TO RESOLVED SCHEDULE DATES ----------

FUNCTION: LIST (FORMAT,LIST,UPD)

JOB: PGDDUMMY NETWORK:
MODSTAT:

SCHID: 101 YEAR: 2001

1 1 2 2 3 3

. . . . 5. . . . 0 . . . . 5. . . . 0 . . . . 5. . . .0 1

JUL 0000000000 0000000000 0000000000 0

AUG 0000000000 0000000000 0000000000 0

SEP 0000000000 0000000000 0000000000

OCT 0000000000 0000000000 0000000000 0

NOV 0000000000 0000000000 0000000000
DEC 0000000000 0000000000 0000000000 0

JAN 0000000000 0000100000 0000000000 0

FEB 0000000000 0000000000 00000000
MAR 0000000000 0000000000 0000000000 0

APR 0000000000 0000000000 0000000000
MAY 0000000000 0000000000 0000000000 0

JUN 0000000000 0000000000 0000000000

PROGRAM: SM80 MSG-INDX: 00 -- DB.2.7 -
- 01.254 / 11:51:20

MESSAGE: LIST FUNCTION SUCCESSFUL FOR SJ000319

As you can see from the above screen, for SCHID 101, this job is scheduled to run on the 15th (top) of January (left-hand side). This is indicated by the "1" on the January line.

To change the day it runs, this screen functions like many of the others. By overtyping the 0's or 1's AND having the FUNCTION field at the top of the screen on UPD. Bear in mind that the job is relative to the SCHID. So in this case, this is only for SCHID = 101, despite the fact that the job runs at other times of year, but under different SCHIDS.

PROGRAM: SM80 MSG-INDX: 00 -- DB.2.7 -
- 01.254 / 11:51:20

MESSAGE: LIST FUNCTION SUCCESSFUL FOR SJ000319

As you can see from the above screen, for SCHID 101, this job is scheduled to run on the 15th (top) of January (left-hand side). This is indicated by the "1" on the January line.

To change the day it runs, this screen functions like many of the others. By overtyping the 0's or 1's AND having the FUNCTION field at the top of the screen on UPD. Bear in mind that the job is relative to the SCHID. So in this case, this is only for SCHID = 101, despite the fact that the job runs at other times of year, but under different SCHIDS.