CA Date Simulator©

Installation and User Guide r2 - Appendix

The following appendices describe changes to the *CA Date Simulator Installation and User Guide r2.*

Contents:

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APPENDIX A - New Installation Step

In *Chapter 2: Installation* (Page 15), the following step is added to the installation procedure:

Step 9. (Optional) Create the WARPFILE for saving Warping criteria

Create and initialize WARPFILE using the following JCL:

```
//*-------------------------------------------------------------------*
//*                                                                   *
//*    DEFINE CA-DATE SIMULATOR WARPFILE.                             *
//*                                                                   *
//*    THIS JCL STREAM WILL ALLOCATE A WARPFILE.                      *
//*                                                                   *
//*    NOTE: PLEASE MAKE THE FOLLOWING CHANGES:                       *
//*                                                                   *
//*    1) INSERT A JOB CARD TO CONFORM TO YOUR INSTALLATION           *
//*       STANDARDS.                                                  *
//*                                                                   *
//*    2) CHANGE $WARPFILE$ TO YOUR WARPFILE DATA SET NAME            *
//*                                                                   *
//*    3) CHANGE $RECS$ TO YOUR SPACE ALLOCATION IN NUMBER OF         *
//*       RECORDS.  DO NOT SPECIFY ANY SECONDARY SPACE.               *
//*                                                                   *
//*       THE SPACE REQUIRED DEPENDS ON THE NUMBER OF WARP JOBS       *
//*       YOU WILL BE SAVING TO WARPFILE, AS WELL AS THE NUMBER OF    *
//*       STCK PROGRAM/OFFSET PAIRS DEFINED FOR EACH JOB.             *
//*                                                                   *
//*       # OF RECS = # OF JOB RECORDS + # OF PGM RECORDS             *
//*                                                                   *
//*       A JOB RECORD IS WRITTEN TO THE FILE FOR EACH SAVED JOB.     *
//*       A PGM RECORD IS WRITTEN TO THE FILE FOR EVERY 1-4 STCK      *
//*       PROGRAM/OFFSET PAIRS SPECIFIED FOR A JOB. (IF MORE THAN 4   *
//*       STCK PROGRAM/OFFSET PAIRS IS SPECIFIED FOR A JOB, MULTIPLE  *
//*       PGM RECORDS ARE WRITTEN TO THE FILE FOR THAT JOB.)          *
//*                                                                   *
//*    4) CHANGE $VOLUME$ TO THE VOLSER THAT THE WARPFILE WILL        *
//*       RESIDE ON.                                                  *
//*                                                                   *
//*    5) CHANGE $LOADLIB$ TO YOUR CA DATE SIMULATOR LOAD LIBRARY     *
//*                                                                   *
//*    6) DO NOT CHANGE THE SIZE PARAMETER.                           *
//*                                                                   *
//*    7) REVIEW ANY OTHER PROC VARIABLES AND CHANGE AS               *
//*       NECESSARY                                                   *
//*                                                                   *
//*-------------------------------------------------------------------*
//DEFSYM   EXEC PGM=IDCAMS,REGION=1024K
//SYSPRINT DD SYSOUT=*
//SYSIN    DD *
  DELETE $WARPFILE$ CLUSTER PURGE
    SET MAXCC=0
```

```
  DEFINE CLUSTER (NAME($WARPFILE$) -
                  SHR(3 3)                                  -
                  RECSZ(80 88)                              -
                  FREESPACE(20 10)                          -
                  KEYS(31 0)                                -
                  INDEXED)                                  -
          DATA (                                            -
              NAME($WARPFILE$.DATA) -
              RECORDS($RECS$)                               -
             VOL($VOLUME$)                                  -
             CONTROL INTERVAL SIZE(2048))                   -
          INDEX (                                           -
             NAME($WARPFILE$.INDEX) -
             TRACKS(10 10)                                  -
             VOL($VOLUME$)                                  -
             CONTROL INTERVAL SIZE(512))
/*
//INIT     EXEC PGM=WARPINIF
//STEPLIB  DD DISP=SHR,
//            DSN=$LOADLIB$
//WARPFILE DD DISP=SHR,
//            DSN=$WARPFILE$
//SYSOUT   DD SYSOUT=*
```

Note: If the second step (Which initializes the file) is not executed, errors will occur when the file is used.

Add the WARPFILE DD statement to Date Simulator WARPIN jcl.
Note: This is the only place the WARPFILE is specified.

```
//DATESIM   JOB
//DATESIM   EXEC PGM=WARPMAIN,PARM='parameters'
//STEPLIB   DD DISP=SHR,DSN=highlvl.vvvv.APFLOAD
//SYSLIB    DD DISP=SHR,DSN=highlvl.vvvv.APFLOAD
//SYSUDUMP  DD SYSOUT=X
//SYSOUT    DD SYSOUT=X
//SYSIN     DD DISP=SHR,DSN=highlvl.vvvv.CNTL(STARTUP)
//WARPFILE  DD DISP=SHR,DSN=hlq.WARPFILE  /* enables SAVE */
```

APPENDIX B - Relocate *Stop CA Date Simulator*

In *Chapter 3: Administration and Operations* (Page 20), the following *Stop CA Date Simulator* section is moved to precede the *Apply Maintenance or Reset the System Clock* section (Previously *Reset the System Clock* on page 24):

Stop CA Date Simulator

Important! Do not use the FORCE command to terminate CA Date Simulator. Use of the FORCE command produces unpredictable results and might require the operating system be reloaded/re-IPLed.

CA Date Simulator runs as a non-cancelable job. To stop the job from the operator console, or through an SDSF session on TSO, use the following STOP command:

```
/STOP jobname
```

Alternatively, you can run the WARPDOWN batch utility program. A Sample JCL for this utility is included in the WARPDOWN member of the installed data set highlvl.vvvv.CNTL.
Example:

```
//SHUTDOWN EXEC PGM=WARPDOWN
//STEPLIB DD DISP=SHR,DSN=highlvl.vvvv.APFLOAD
```

APPENDIX C - Enhanced *Reset The System Clock*

The Reset the System Clock section (Page 24) is replaced by the following enhanced content:

Apply Maintenance or Reset the System Clock

The system clock is traditionally set to Universal Time (formerly Greenwich Mean Time). However, business applications generally use LOCAL TIME. The difference between UTC and LOCAL time is referred to as the TIMEZONE. The z/OS MVS system stores the local TIMEZONE in the CVTLDTO (local date time offset) system field. CA Date Simulator results depend on both the system clock and on CVTLDTO values.

The local TIMEZONE is traditionally changed biannually to accommodate Daylight Savings Time in the US, British Summer Time in the UK, and summer/winter time in other locations.

The source of the local time zone setting is controlled by the SYS1.PARMLIB(CLOCKxx) parameter. There are several methods and utilities used to update the CVTLDTO value. System operator commands are the simplest example of how to change the CVTLDTO time zone values:

```
SET TIMEZONE=D.HH.MM
```

To minimize processing overhead on time/date requests, the CVTLDTO value is copied to a CA Date Simulator control block when the CA Date Simulator starts.
Note: To start CA Date Simulator, execute PGM=WARPMAIN.

If CA Date Simulator is executing when the local TIMEZONE (For example. CVTLDTO) is changed, a stop and restart of the CA Date Simulator is required to update the copied CVTLDTO value. Without this restart, CA Date Simulator will report the time incorrectly.

CA Date Simulator has a separate component, WARPCICS, that executes in CICS. When CICS starts, WARPCICS copies the value from WARPMAIN to local CICS storage. If CICS is executing when the time zone is changed, CICS must be restarted after WARPMAIN restarts.

In this context, use the following procedure after CVTLDTO is changed:
Important!: When applying maintenance to Date Simulator, or when CVTLDTO is updated, the following steps must be completed in order indicated. Failure to complete these steps in this order might require an IPL.

1. Stop CA Date Simulator.To stop CA Date Simulator, execute //STEP1 EXEC

PGM=WARPDOWN, or issue a "P jobname" where jobname is the name of the CA Date SimulatorTask.

2. Shutdown CICS regions where CA Date Simulator is installed. CICS regions that use CA Date Simulator display the following message in the job output:

   DATE SIMULATOR SUCCESSFULLY INSTALLED

3. To change the timezone if applicable, use the SET TIMEZONE or SET CLOCK commands.

4. Start CA Date Simulator. Start CA Date Simulator task, or submit jcl to execute WARPMAIN

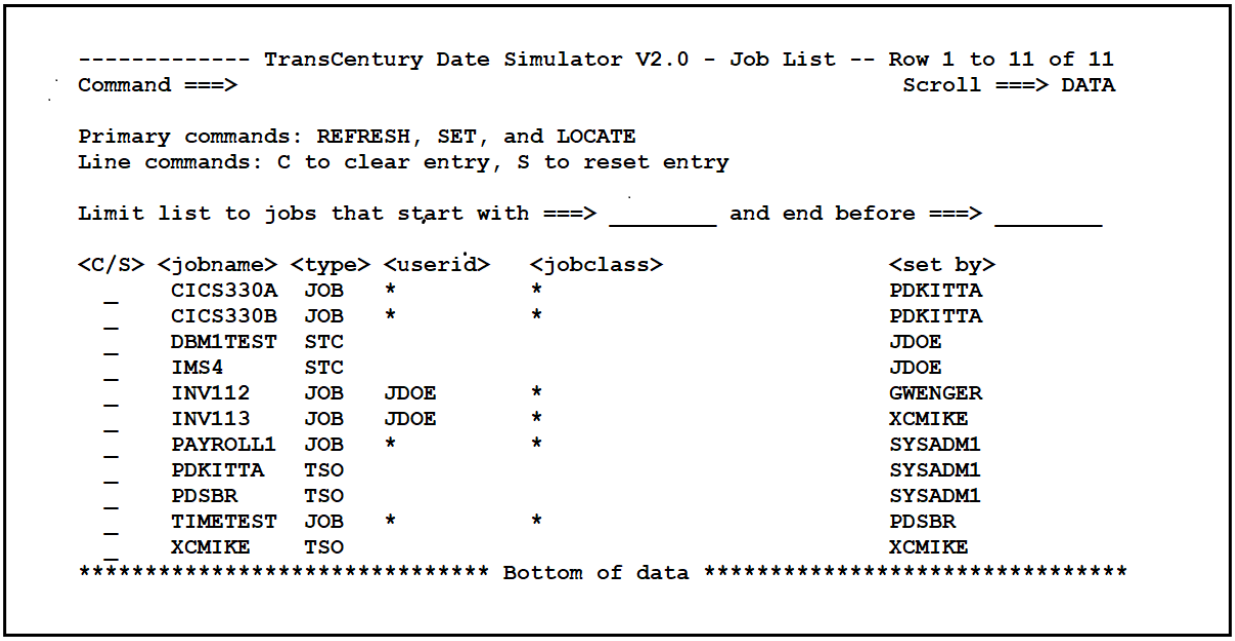
```
//STEP1     EXEC PGM=WARPMAIN,PARM='STCKSVC=nnn'
```

5. Start the CICS regions.

APPENDIX D - Replaced Job List Screen Example

In *Chapter 4: Jobs and Controls* (Page 29) / *Use an ISPF Dialog* / *Access the CA Date Simulator Controller Dialog*, the *Job List* screen example (Page 30) is replaced with the following example:

The CA Date Simulator Job List screen is displayed:



```
------------ TransCentury Date Simulator V2.0 - Job List -- Row 1 to 11 of 11
Command ===>                                                  Scroll ===> DATA

Primary commands: REFRESH, SET, and LOCATE
Line commands: C to clear entry, S to reset entry

Limit list to jobs that start with ===> ________ and end before ===> ________

<C/S> <jobname> <type> <userid>   <jobclass>                <set by>
  _     CICS330A  JOB    *          *                        PDKITTA
  _     CICS330B  JOB    *          *                        PDKITTA
  _     DBM1TEST  STC                                        JDOE
  _     IMS4      STC                                        JDOE
  _     INV112    JOB    JDOE       *                        GWENGER
  _     INV113    JOB    JDOE       *                        XCMIKE
  _     PAYROLL1  JOB    *          *                        SYSADM1
  _     PDKITTA   TSO                                       SYSADM1
  _     PDSBR     TSO                                       SYSADM1
  _     TIMETEST  JOB    *          *                        PDSBR
  _     XCMIKE    TSO                                       XCMIKE
****************************** Bottom of data ********************************
```

APPENDIX E - Added LOCATE Bullet Point

Under *CA Date Simulator Job List Screen* (Page 30), the third bullet point, LOCATE, is added to the following section:

CA Date Simulator Job List Screen

The CA Date Simulator Job List Screen lists the jobs that are already under the control of CA Date Simulator, and shows the ID of the user who last SET each job.

You can perform the following functions from the panel:

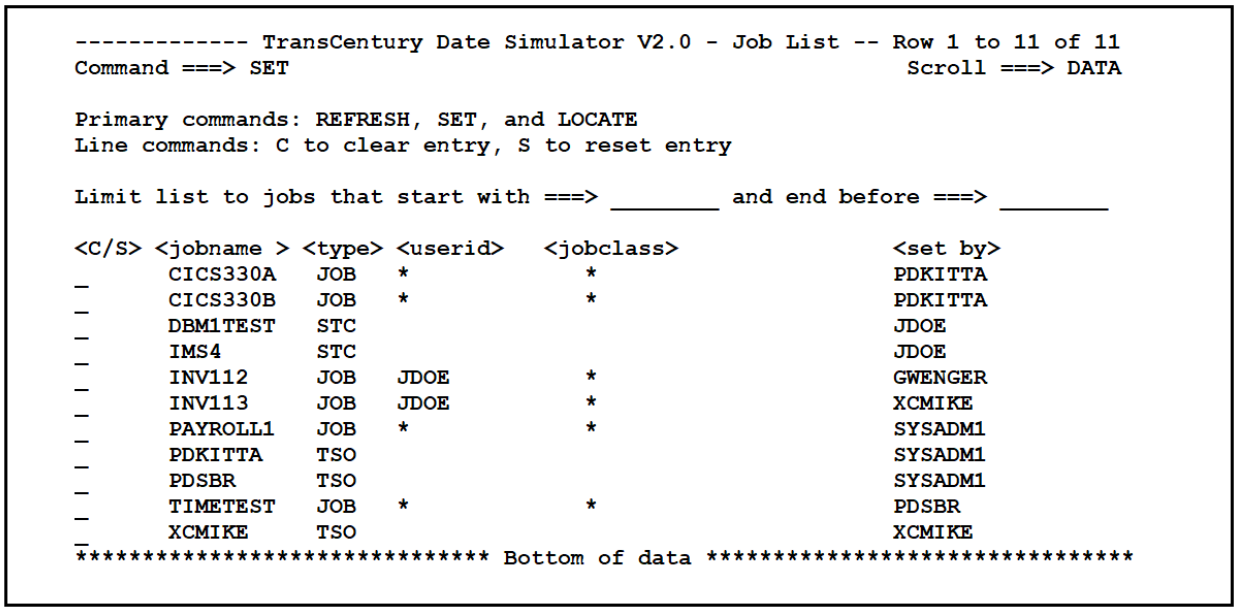
- SET new jobs to be placed under the control of CA Date Simulator
- CLEAR jobs that are currently under the control of CA Date Simulator
- LOCATE a job under the control of CA Date Simulator by name

The following sections explain the SET and CLEAR procedures.

APPENDIX F - Replaced SET Entered Example

Under *Set Jobs to be Warped* (Page 31), the *SET entered* example is replaced with the following example:

The following example shows SET entered in the command line:

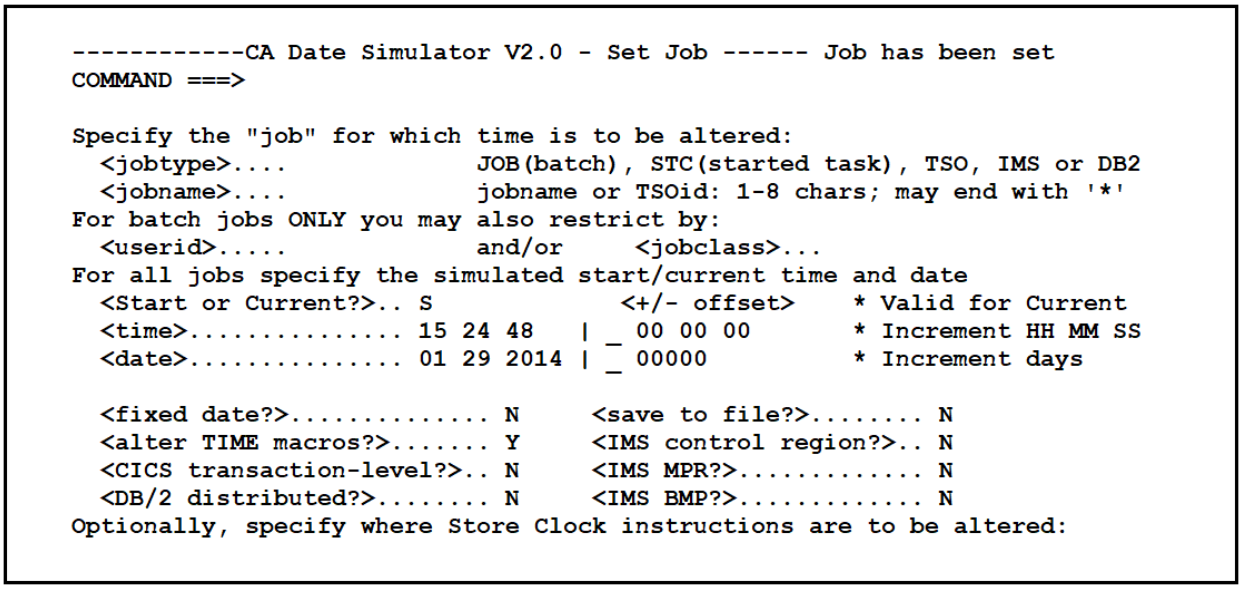


```
------------- TransCentury Date Simulator V2.0 - Job List -- Row 1 to 11 of 11
Command ===> SET                                              Scroll ===> DATA

Primary commands: REFRESH, SET, and LOCATE
Line commands: C to clear entry, S to reset entry

Limit list to jobs that start with ===> ________ and end before ===> ________

<C/S> <jobname > <type> <userid>   <jobclass>               <set by>
_      CICS330A   JOB   *             *                     PDKITTA
_      CICS330B   JOB   *             *                     PDKITTA
_      DBM1TEST   STC                                       JDOE
_      IMS4       STC                                       JDOE
_      INV112     JOB   JDOE          *                     GWENGER
_      INV113     JOB   JDOE          *                     XCMIKE
_      PAYROLL1   JOB   *             *                     SYSADM1
_      PDKITTA    TSO                                       SYSADM1
_      PDSBR      TSO                                       SYSADM1
_      TIMETEST   JOB   *             *                     PDSBR
_      XCMIKE     TSO                                       XCMIKE
****************************** Bottom of data ********************************
```

APPENDIX G - Replaced SET Job Screen Example

Under *Set Jobs to be Warped* (Page 31), the *SET Job* screen example is replaced with the following example:

The Set Job screen is displayed:



APPENDIX H - New Section, CICSTRAN

In the *SET* section (Page 41), the following new *CICSTRAN(jobname, transcode, userid, terminal id)* section is added below the *IMSBMP* section (Page 43):

CICSTRAN(jobname, transcode, userid, terminal id)

This parameter lets users use a WARPPARM control card to specify individual CICS transaction settings. These settings create a CICSTRAN control block in CSA storage with the SET JOB control blocks. CICS does not need to be executed when these SET commands are executed.

Example of a WARPPARM control card:

```
SET CICSTRAN(CICSQA5,TIME,*,*) DATE 12/25/2025 TIME
12:30:00 FIXED
```

In the preceding example, the TIME transaction produces a date of 12/25/2025 in a CICS job named CICSQA5. CICSTRAN removes the requirement to run the DTSM transaction to set the warping criteria on individual transactions. Use DTSM to override the setting from WARPPARM for the life of the CICS region.

When you specify values on a SET CICSTRAN control card, the following fields support wildcarding:

- Jobname
- Transcode
- userid,
- terminal id

Example:

```
SET CICSTRAN(CICSQA5,TIME,*,*) DATE 01/01/2001 TIME
23:59:55

SET CICSTRAN(*,*,CICSU*,*)     DATE 02/02/2002 TIME
23:59:55

SET CICSTRAN(*,*,*,G002)       DATE 03/03/2003 TIME
23:59:55

SET CICSTRAN(*,*,*,*)          DATE 04/04/2004 TIME
23:59:55
```

In the case of multiple wildcards, which SET card applies might be unclear.

Date Simulator selects the most qualified setting in the following order:

1. JOBNAME
2. TERMID
3. USERID
4. TRANSCODE.

In the previous example, user CICSUSER at terminal G002 is warped to 2003.

If a different terminal is used, CICSUSER is warped to 2002.

If the user is not CICSUSER, and not on terminal G002, the TIME transaction reflects 2001 in the CICSQA5 region, but reflects 2004 everywhere else.

APPENDIX I - New Section, *SAVE*

In the *SET* section (Page 41), the following new *Save* section is added below the *STCK(program1, offset1; program2, offset2.)* section (Page 43):

SAVE

The SAVE parameter indicates that the setting should be written to the WARPFILE. The setting can only be saved if the WARPFILE DD is included in the WARPMAIN JCL at startup.

The SAVE is performed only after the SET is successfully performed. The WARPFILE DD statement is not specified in the WARPPARM step. If a previously SET job is RESET without a SAVE parameter, the SAVED setting is deleted.

APPENDIX J - Updated *EIBDATE Support*

In *Chapter 6: CICS Transaction Level Support* (Page 49), the *Install EIBDATE Support* section (Page 50) is amended to include the following content:

Install EIBDATE support

To install EIBDATE support

Installation of EIBDATE support requires the following modifications to CICS:

1. Add the CA Date Simulator non-APF load library to the DFHRPL DD concatenation.
   JCL example:

```
//DFHRPL DD DSN=…..
//DD DSN=highlvl.vvvv.LOAD,DISP=SHR
```

2. Use macros to define the following resources:

```
DFHPPT TYPE=ENTRY,PROGRAM=WARPCTIM
DFHPPT TYPE=ENTRY,PROGRAM=WARPCIC2
DFHPPT TYPE=ENTRY,PROGRAM=WARPCIC4
DFHPPT TYPE=ENTRY,PROGRAM=TIMECICS

DFHPCT TYPE=ENTRY,TRANSID=DTSM,PROGRAM=WARPCIC2
DFHPCT TYPE=ENTRY,TRANSID=DTHK,PROGRAM=WARPCIC4
DFHPCT TYPE=ENTRY,TRANSIT=TIME,PROGRAM=TIMECICS
```

   or RDO commands:

```
CEDA DEFINE GROUP(DATESIM) PROGRAM(WARPCTIM) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) PROGRAM(WARPCICS) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) PROGRAM(WARPCTIM) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) PROGRAM(WARPCICS) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) PROGRAM(WARPCIC2) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) PROGRAM(TIMECICS) LANG(ASSEM)
CEDA DEFINE GROUP(DATESIM) TRAN(DTSM) PROGRAM(WARPCIC2)
CEDA DEFINE GROUP(DATESIM) TRAN(DTHK) PROGRAM(WARPCIC4)
CEDA DEFINE GROUP(DATESIM) TRAN(TIME) PROGRAM(TIMECICS)
```

   Note: You can change the DTSM and TIME transaction names to suit your installation naming conventions, or to avoid conflicts with previously defined transactions.

Note: If you use the optional CICS Security exit WARPCSEC, change the RDO entries for DTSM, DTHK, WARPCICS and WARPCIC2 to use TASK DATEKEY(CICS) and EXECKEY(CICS).

3. Add the following entry for WARPCTIM to CICS program list table post initialization (PLTPI) table:

```
DFHPLT TYPE=ENTRY,PROGRAM=WARPCTIM
```

4. Ask your MVS system programmer to determine whether the CICS modules DFHAIP or DFHEIP are placed in the Link Pack Area. As part of the initialization phase, the WARPCTIM program must alter one of these modules, depending on the release of CICS. WARPCTIM cannot alter DFHAIP or DFHEIP when these modules are in the Link Pack Area. When this occurs, CICS encounters a protection exception during initialization.

APPENDIX K - Added Note To *TIME/STCK Support*

Under *TIME/STCK Support* (Page 54), the following note is added to the end of the *Operation* section (Page 55):

Note: STCK hooks into CEEPLPKA are normally done during CICS startup. If a SET JOB ...STCK(CEEPLPKA,offset) is issued after CICS is started, you can use the DTHK transaction to manually install the hook.