CA IDMS - 19.0

Storage Key Considerations for z/OS CSA Subpools

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The AllowUserKeyCSA parameter was introduced in z/OS V1.8 to prevent jobs from allocating storage from CSA subpools using user keys 8 through 15. You can specify AllowUserKeyCSA(YES) or AllowUserKeyCSA(NO). The default at z/OS V1.8 or lower is AllowUserKeyCSA(YES). Starting at V1.9, the default is AllowUserKeyCSA(NO).

You can determine the current setting of AllowUserKeyCSA by issuing the D DIAG command from the z/OS console.

If YES is specified, there is no impact on CA IDMS or jobs that communicate with CA IDMS through the External Run Unit System (Batch to CV, CICS, etc).

If NO is specified, the CA IDMS system abends during startup with a system abend code of B78-5C unless the following steps are taken:

1. Place the following modules in a special load library:

   - RHDCOMVS.
   - RHDCTCKR
   - RHDCCKUR

   Alternatively, the load library can be a copy of the installed or deployed z/OS CA IDMS load library.

2. Authorize that load library by adding a control statement to the appropriate SYS1.PARMLIB(PROG..) member, for example, APF ADD DSNAME(*my.apflib*) VOLUME(*vvvvvv*).

3. Update the appropriate SYS1.PARMLIB(SCHED..) member to include the following line:

```
PPT PGMNAME($STARTUP),KEY(4),NOSWAP
o $STARTUP
```

   - **$STARTUP**
     Specifies the CA IDMS/DC startup module name - RHDCOMVS, IDMSDC, or IDMSDCV.

     Note: If your IDMS SVC is created with #SVCOPT parameter CVKEY=*, the change to run the IDMS CV in Key 4 has no effect on the use of that SVC. However, if CVKEY is specified as a number, the SVC verifies that the IDMS CV is running in that primary protect key. If it does not match, the CV abends with Senn, where 'nn' is the hexidecimal SVC number used. Therefore, the SVC needs to be recreated with parameter CVKEY=4 and needs to be refreshed with CAIRIM before bringing up the CV in Key 4.

4. In the CA IDMS startup JCL, ensure that the library containing the startup module, RHDCTCKR, and RHDCCKUR is the only library specified in STEPLIB.

5. Specify STEP=Y on the EXEC parm as follows:
   Example

```
//IDMSDC  EXEC PGM=RHDCOMVS,REGION=0M,TIME=1440,
//        PARM='S=100,STEP=Y            '
```

   You can also specify that CA IDMS is to load RHDCCKUR and RHDCTCKR from STEPLIB using the positional "S" startup parameter as follows:
   Example

```
                         1         2         3         4
                12345678901234567890123456789012345678901

//IDMSKY EXEC PGM=RHDCOMVSW,REGION=0K,TIME=1440,
//       PARM='S=100         S            '
```

   Note:"S" in position 10 following the system number instructs the CA IDMS system to load RHDCCKUR and RHDCTCKR from STEPLIB.

To verify that key 4 is in fact being used, you can run the DCPROFIL task. See the field labeled PRIMARY STORAGE PROTECT KEY.

Note: If an abend should occur during CA IDMS system initialization, it is possible that a complete system dump will not be captured because a system key is being used instead of a user key. The operating system design is not to dump storage for keys 0 to 7 (system keys).

To ensure complete dumps are always captured, the user associated with the startup of the CA IDMS system needs to be granted READ access to facility IEAABD.DMPAKEY. For more information on the procedures to grant access to a facility, see the appropriate security sub-system documentation.