

CA IDMS V19 - experiences

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CA IDMS V19 - experiences

- Installation and Distribution
- SQL enhancements for NONSQL databases
- Handling enhancements
- Other nice side effects
- Questions

Installation and Distribution

- Installation using CSM
- Acquire product
- Create SMP/E environment & Install
- Apply Maintenance
- Deploy product
- Customize product

Installation using CSM

Aquire - Automatic download base product into z/OS USS file system

Create a new SMP/E environment – no SMP/E knowledge needed. Product is then installed into z/OS SMP/E controlled datasets

Available maintenance can then be applied

Deployable runtime libraries will be created (e.g. LOADLIB, MACLIB, SRCLIB)

Customization must follow for site specific needs – e.g. SVC, Codetable, Parms modules (tools)

Update of Dictionaries, Catalogs and Sysgen for all IDMS Systems with Userbuilt procedures

SQL enhancements for NONSQL databases

- Virtual foreign keys

replaces the IDMS SQL non ANSI extension
,where „SET-NAME“

works for SELECT, UPDATE, INSERT, DELETE

stands for the db-key of a member record in a set

Virtual foreign keys

Without:

```
*+ CREATE SCHEMA EMPSCHM
*+ FOR NONSQL SCHEMA APPLDICT.EMPSCHM VERSION 100
*+ ;
```

```
set session current schema empschm;
select * from expertise, employee
where emp_id_0415=101 and "EMP-EXPERTISE";
```

```
*+
*+ SKILL_LEVEL_0425 EXPERTISE_YEAR_0425 EXPERTISE_MONTH_0425
*+ -----
*+ 03 1977 6
*+ 03 1977 6
*+ 03 1977 6
*+
*+ EXPERTISE_DAY_0425 EMP_ID_0415 EMP_FIRST_NAME_0415 EMP_LAST_NAME_0415
*+ -----
*+ 7 101 BRIAN NICEMAN
*+ 7 101 BRIAN NICEMAN
*+ 7 101 BRIAN NICEMAN
```

Virtual foreign keys

With:

```
*+ CREATE SCHEMA EMPSCHMF
*+      FOR NONSQL SCHEMA APPLDICT.EMPSCHM VERSION 100
*+      WITH VIRTUAL KEYS; set session current schema empschmf;
select * from EXPERTISE where FKEY_EMP_EXPERTISE =
(select ROWID from EMPLOYEE where EMP_ID_0415 = 101) ;
```

```
*+ SKILL_LEVEL_0425    EXPERTISE_YEAR_0425    EXPERTISE_MONTH_0425
*+ -----
*+ 03                  1977                  6
*+ 03                  1977                  6
*+ 03                  1977                  6
*+ EXPERTISE_DAY_0425          ROWID          FKEY_EMP_EXPERTISE
*+ -----
*+              7    X'0032F305000000008'    X'0032F301000000008'
*+              7    X'0032F304000000008'    X'0032F301000000008'
*+              7    X'0032F303000000008'    X'0032F301000000008'
*+ FKEY_SKILL_EXPERTISE
*+ -----
*+ X'00336605000000008'
*+ X'00337202000000008'
*+ X'00336E03000000008'
```

Virtual foreign keys

Does not work if the original NONSQL Schema already has **real** foreign keys:

```
*+ CREATE SCHEMA LSVSCHEM
*+     FOR NONSQL SCHEMA LSVDict.TESCHe01 VERSION 1
*+     DBNAME LSVDB
*+     WITH VIRTUAL KEYS
*+     ;
```

```
set session current SCHEMA LSVSCHEM;
select * from re0147db where elpers_id=27;
```

```
*+ Status = -4          SQLSTATE = 42000          Messages follow:
*+ DB005007 T556 C-4M324: Primary/foreign keys defined for SET SET0051 are not
*+ allowed to be used with virtual key schemas
```

Handling enhancements

- zIIP can be dynamically turned on/off
- Archive Log can be triggered with DCMT V LOG

Other nice side effects

SQL option is now available for everybody – so use it! Ptf RO96807

Installing Visual DBA brings some Table Procedures which can also be called by external (ODBC) SQL requests:

DCMT and DCUF commands can be invoked – SYSCA.VDBADCT5

IDD, OCF, SCHEMA, SSC, SYSGEN compilers can be called – SYSCA.VDBAIDD5

Calling DCMT

```
select
  substr(syslst,1,76)
from SYSCA.VDBADCT5
where
  COMPILER = 'DCMT' and
  SYSIPT = 'DIS JOURNAL'
```

```

;
*+
*+ SUBSTR(FUNCTION)
*+ -----
*+ Disk Journal      Segno   LoRBN   HiRBN   NxRBN   Ful   Act   Rcv   Arc   Stat   DsRBN   DsINTV
*+ J1JRNL            281     124     20000  ***** NO   NO   NO   NO     0
*+ J2JRNL            282      45     20000  ***** NO   NO   NO   NO     0
*+ J3JRNL            283       8     20000      56   NO YES NO   NO     0      309      300
*+ J4JRNL            280      76     20000  ***** NO   NO   NO   NO     0
*+
*+ 5 rows processed
```

Any questions?