



SQLK

un couteau suisse pour DBA

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- Créé pour réduire à moins de 32K du DDL en V7
 - Aujourd'hui version 3.51
- Fonctions ajoutées au fur et à mesure des besoins
 - Restart au dernier point de synchro
 - Bypass de certains SQLCODE négatifs
 - Enchaînement génération de DDL, DML, commandes et exécution du généré
 - Exécution de commandes, utilitaires en + du SQL
 - S'affranchir des LRECL en input et formatage de la sortie
 - Utilisation des Parameters Marker
 - Appel de Stor Proc
 - Affichage et Génération de ZPARM
 - Aide en ligne, Batch, Code retour,
- Licence GPL



SQLK V3.5

```

=====
==>
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> LRecIn..... ==>

Command ..... ==> E (Edit/eXec/Batch/View out/Zparm)

+ Use Hostvar .... ==> N (Yes/No/Edit)
+ Use Symbol .... ==> N (Yes/No/Edit)

SQLOUT File..... ==> ibmuser.sqlkout
Member ..... ==> LRecOut.... ==>
Header .... ==> Y (Y/N/V) MaxVarChar. ==>
Padding ... ==> Y (Y/N) Del Char... ==>

Commit ..... ==> S (Commit/Rollback/Sync/nnn)
DB2 SSID ..... ==> DB2A SQLID ..... ==>
More Exec Option SCHEMA .... ==>
Restart ..... ==> (nnn/literal)
Bypass SQLCODEs. ==> ==> ==>
Prepare Only ... ==> N
';;' = End ..... ==> Y (Y/N) Sql Delim . ==> ;
Shrink ..... ==> N (Y/N)
Out ==> In ..... ==> N (Y/N)
Isolation..... ==> UR (UR/CS/RR/RS)
Verbose ..... ==> D (A,D,N)

More Output Option
Padding Char ... ==> _
Null Char ..... ==> _
Delimited ..... ==> Y
  
```

Pas de quote sur les nom de fichiers

Options recommandées

- Option 1:

```
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D01DDL

Command ..... ==> E (Edit/eXec/Batch

+ Use Hostvar .... ==> N (Yes/No/Edit)
+ Use Symbol .... ==> N (Yes/No/Edit)

SQLOUT File..... ==> IBMUSER.SQLOUT
Member ..... ==>
Header .... ==> Y (Y/N/V)
Padding ... ==> Y (Y/N)

Commit ..... ==> C
DB2 SSID ..... ==> DB2A

More Exec Option
Restart ..... ==>
Bypass SQLCODEs. ==> -601
Prepare Only ... ==> N
```

BYPASS du SQLCODE

■ Option 2

```
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D02DDL

Command ..... ==> x      (Edit/eXec/Bat

Use Hostvar .... ==> N      (Yes/No/Edit)
Use Symbol .... ==> N      (Yes/No/Edit)

SQLOUT File..... ==> IBMUSER.SQLKOUT
Member ..... ==>
    Header .... ==> Y      (Y/N/V)
    Padding ... ==> Y      (Y/N)

Commit ..... ==> S
DB2 SSID ..... ==> DB20
ore Exec Option
Restart ..... ==> TSUTILK
```

-SYNC dans le fichier IN

Commit : S

Restart au point SYNC

■ Externalisation SQLID et SCHEMA

```
(Commit/Rollback/Sync/nnn)
SQLID ..... ==> DB2ADM
SCHEMA ..... ==> DEMOSQLK
(nnn/literal)
==>
```

■ Variabilisation du DDL

- Chaînes libres
- Fichier de « mapping »

```
- Use Symbol ..... ==> E (Yes/No/Edit)
Symbol File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D04SYM
```

```
SQLK.DEMO.GUIDE(D04SYM)
==>
*****
€DBNAME=DBDEMO
€STOGROUP=SYSDEFLT
€SQLID=DB2ADM
€SCHEMA=DEMOSQLK
```

- SQLID & SCHEMA peuvent également être variabilisé

```
----- Job Card -----  
//IBMUERY JOB CLASS=A,REGION=0M,  
//  MSGCLASS=X,NOTIFY=&SYSUID,MSGLEVEL=(1,1)  
  
/ Press / to suppress Syntax help into Job  
/ Press / to suppress Job Card Confirmation  
Enter Command JOBCARD ON to display this panel again
```

```
//IBMUERY JOB CLASS=A,REGION=0M,  
//  MSGCLASS=X,NOTIFY=&SYSUID,MSGLEVEL=(1,1)  
//STEP1 EXEC PGM=IKJEFT1B,PARM='SQLBATCH,DB2A'  
//SYSTSPRT DD SYSOUT=*  
//SYSPRINT DD SYSOUT=*  
//SYSEXEC DD DISP=SHR,DSN=SQLK.V351.CNTL  
//SYSTSIN DD *  
//SYSIN DD *  
        SQLID(£SQLID)  
        Schema(£SCHEMA)  
        COMMIT(SYNC)  
        SQLSYM(SQLKSYM)  
        EMPTY_MEAN_END(Y)  
        PS_RS(N)  
/*  
//SQLKSYM DD DISP=SHR,  
//        DSN=SQLK.DEMO.GUIDE(D04SYM)  
//SQLIN DD DISP=SHR,DSN=SQLK.DEMO.GUIDE(D04DDL)  
//SQLOUT DD SYSOUT=*
```

Intérogation du Catalogue

```
----- SQLK V3.5 -----
==> _

SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D00SELTB          LRecIn..... ==> _____
                                         More:      +

Command ..... ==> E      (Edit/eXec/Batch/View out/Zparm)

+ Use Hostvar .... ==> N      (Yes/No/Edit)
+ Use Symbol .... ==> N      (Yes/No/Edit)

SQLOUT File..... ==> IBMUSER.SQLKOUT
Member ..... ==> _____          LRecOut.... ==> _____
  Header .... ==> Y      (Y/N/V)      MaxVarChar. ==> 48
  Padding ... ==> Y      (Y/N)         Del Char... ==> _____

Commit ..... ==> S              (Commit/Rollback/Sync/nnn)
DB2 SSID ..... ==> DB2A          SQLID ..... ==> £SQLID
More Exec Option  SCHEMA .... ==> £SCHEMA
Restart ..... ==> 0              (nnn/literal)
Bypass SQLCODEs. ==> _____ ==> _____ ==> _____
Prepare Only ... ==> N
';;' = End ..... ==> Y      (Y/N)      Sql Delim . ==> ;
Shrink ..... ==> N      (Y/N)
Out ==> In ..... ==> N      (Y/N)
Isolation..... ==> UR      (UR/CS/RR/RS)
Verbose ..... ==> D      (A,D,N)

More Output Option
Padding Char ... ==> _          Num Pad.... ==> _
Null Char ..... ==> _          Number.... ==> N      (Y/N)
Delimited ..... ==> Y          Result Set. ==> N      (Y/N)

-DSLIST *SQLKP
```


More: -

```
+ Use Hostvar .... ==> N (Yes/No/Edit)
+ Use Symbol .... ==> N (Yes/No/Edit)

SQLOUT File..... ==> SQLK.DEMO.GUIDE
Member ..... ==> BINDPK
Header .... ==> N (Y/N/V)
Padding ... ==> N (Y/N)

LRecOut.... ==> 72
MaxVarChar. ==>
Del Char... ==> _

Commit ..... ==> S (Commit/Rollback/Sync/nnn)
DB2 SSID ..... ==> DB2A
SQLID ..... ==>
SCHEMA .... ==>
More Exec Option
Restart ..... ==> 0 (nnn/literal)
Bypass SQLCODEs. ==> ==>
Prepare Only ... ==> N
';;' = End ..... ==> Y (Y/N)
Shrink ..... ==> N (Y/N)
Out ==> In ..... ==> N (Y/N)
Isolation..... ==> UR (UR/CS/RR/RS)
Verbose ..... ==> D (A,D,N)
Sql Delim . ==> ;

More Output Option
Padding Char ... ==> _
Null Char ..... ==>
Delimited ..... ==> Y
ContChar ..... ==> +
Generate Sync .. ==> N (N/F/V)
Value .. ==> 5
Num Pad.... ==>
Number..... ==> N (Y/N)
Result Set. ==> N (Y/N)

(IF F Frequency / IF V Col Num)
```

Génération avec enchainement de l'Exécution

```
SQLK V3.3
==>
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> BINDPK
Command ..... ==> E (Edit/eXec/Batch/View out/Zparm)
+ Use Hostvar .... ==> N (Yes/No/Edit)
+ Use Symbol .... ==> N (Yes/No/Edit)
SQLOUT File..... ==> D
Member ..... ==> BINDPK
Header ..... ==> N (Y/N/V)
Padding ... ==> N (Y/N)
LRecIn..... ==>
LRecOut.... ==> 72
MaxVarChar. ==>
Del Char... ==>
Commit ..... ==> S (Commit/Rollback/Sync/nnn)
DB2 SSID ..... ==> DB2A
SQLID ..... ==>
SCHEMA .... ==>
More Exec Option
Restart ..... ==> 0 (nnn/literal)
Bypass SQLCODEs. ==>
Prepare Only ... ==> N
';;' = End ..... ==> Y (Y/N)
Shrink ..... ==> N (Y/N)
Out ==> In ..... ==> N (Y/N)
Isolation..... ==> UR (UR/CS/RR/RS)
Verbose ..... ==> D (A,D,N)
Sql Delim . ==> ;
More Output Option
Padding Char ... ==>
Null Char ..... ==>
Delimited ..... ==> Y
Num Pad.... ==>
Number..... ==> N (Y/N)
Result Set. ==> N (Y/N)
```

Génération avec enchainement de l'Exécution Batch

```
//STEP1      EXEC PGM=IKJEFT1B,PARM='SQLBATCH,DB2A'
//SYSTSPRT   DD SYSOUT=*
//SYSPRINT   DD SYSOUT=*
//SYSEXEC    DD DISP=SHR,DSN=SQLK.V351.CNTL
//SYSTSIN     DD *
              COMMIT(SYNC)
              LREOUT(72)
              EMPTY_MEAN_END(Y)
              PS_RS(N)
              HEADER(NO)
              PHD(NO)
              RC(1,>0)
/*
//SQLIN      DD DISP=SHR,DSN=SQLK.DEMO.GUIDE(D06GRBND)
//SQLOUT     DD DISP=SHR,DSN=SQLK.DEMO.GUIDE(BINDPK)
/*
//*
//OUTIN      IF STEP1.RC = 1 THEN
//STEP2      EXEC PGM=IKJEFT1B,PARM='SQLBATCH,DB2A'
//SYSTSPRT   DD SYSOUT=*
//SYSPRINT   DD SYSOUT=*
//SYSEXEC    DD DISP=SHR,DSN=SQLK.V351.CNTL
//SYSTSIN     DD *
              COMMIT(SYNC)
              LREIN(72)
DDF -DSLIST
```

```
and ==> _____ Scroll
** ***** Top of Data *****
00 INSERT INTO TBUTILK_EXCLUDE
00   ( DBNAME , SPNAME , PARTITION , OTYPE , UTYPE , STYPE )
00   VALUES ( ? , ? , ? , ? , ? , ? )
00   ;
** ***** Bottom of Data *****
```

```
File Edit Edit_Settings Menu Utilities
EDIT      SQLK.DEMO.GUIDE(V07INS) - 01.01
Command ==> _____
***** ***** Top of D
000001 DBUTK;TSUTILEX;0;S;C;R
000002 DBUTK;TSUTILK;0;S;C;R
000003 DBUTK;TSUTILKH;0;S;C;R
000004 DBUTK;TSUTILKP;0;S;C;R
000005 DBUTK;TSUTILKS;0;S;C;R
000006 DBUTK;TSUTILSK;0;S;C;R
000007 DBUTK;TSUTLCKU;0;S;C;R
000008 DBUTK;TSUTPKGE;0;S;C;R
***** ***** Bottom of
```

```
==> _____ More: +
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D07INS LRecIn..... ==> _____
Command ..... ==> E (Edit/eXec/Batch/View out/Zparm)
- Use Hostvar .... ==> Y (Yes/No/Edit)
Hostvar File ... ==> SQLK.DEMO.GUIDE
Member ..... ==> V07INS Var Delimiter..: ;
+ Use Symbol ..... ==> N (Yes/No/Edit)
```

Parameters Markers : Commit

```
===> More:
SQLIN File ..... ==> SQLK.DEMO.GUIDE
Member ..... ==> D07INS LRecIn..... ==> _____

Command ..... ==> x (Edit/eXec/Batch/View out/Zparm)

+ Use Hostvar .... ==> N (Yes/No/Edit)

- Use Symbol .... ==> Y (Yes/No/Edit)
Symbol File .... ==> SQLK.DEMO.GUIDE
Member ..... ==> D04SYM

SQLOUT File..... ==> IBMUSER.SQLKOUT
Member ..... ==> _____ LRecOut.... ==> _____
Header .... ==> Y (Y/N/V) MaxVarChar. ==> _____
Padding ... ==> Y (Y/N) Del Char... ==> _____

Commit ..... ==> 3 (Commit/Rollback/Sync/nnn)
DB2 SSID ..... ==> DB2A SQLID ..... ==> _____
More Exec Option SCHEMA .... ==> £SCHEMA
Restart ..... ==> 0 (nnn/literal)
Bypass SQLCODEs. ==> _____ ==> _____
Prepare Only ... ==> N
';;' = End ..... ==> Y (Y/N) Sql Delim . ==> ;
Shrink ..... ==> N (Y/N)
Out ==> In ..... ==> N (Y/N)
Isolation..... ==> KS (UR/CS/RR/RS)
Verbose ..... ==> 0 (A,D,N)
```

```

EDIT          SQLK.DEMO.GUIDE(D11LOAD) - 01.14          Columns 00001 000
Command ==> _____ Scroll ==> CSF
000007 TEMPLATE UT1
000008 DSN IBMUSER.&SSID..&DB..&TS..UT1.TEMP
000009 UNIT 3390 VOLUMES(WRK002)
000010 DISP=(NEW,DELETE,CATLG) SPACE(10,10) CYL
000011
000012 TEMPLATE REC
000013 DSN IBMUSER.&SSID..&DB..&TS..REC.TEMP
000014 UNIT 3390 VOLUMES(WRK002)
000015 DISP=(NEW,DELETE,CATLG) SPACE(10,10) CYL
000016
000020 EXEC SQL
000100     DECLARE C01 CURSOR  FOR
000110     SELECT
000200         DBNAME , SPNAME , PARTITION , OTYPE , UTYPE , STYPE
000210     FROM   UTILK.TBUTILK
000220     WHERE DBNAME <>  'DBUTK'
000221 ENDEXEC
000222
000223 LOAD INCURSOR C01
000224     LOG NO RESUME NO REPLACE
000225     WORKDDN(UT1,REC) SORTKEYS 51
000226     INTO TABLE &SCHEMA.TBUTILK
000230 ;
***** Bottom of Data *****

```

```
000100 CALL SYSPROC.ADMIN_COMMAND_DB2
000200 (? , ? , ? , ?? , ? , ? , ? , ? , ? , ? , ?? )
000300 ;
```

- Parameters Markers Obligatoire
 - Sans oublier les indicateurs de null
- Paramètres out initialisés :
 - 0 pour les numériques, ' ' sur toute la longueur pour char et varchar

```
***** Top of Data *****
-DISPLAY DATABASE(*) SPACENAM(*) RESTRICT LIMIT(*) ;50;TS;;-1;0;0;0;0;0;0
***** Bottom of Data *****
```

Stored Proc : Select sur le Result Set

```
CALL SYSPROC.ADMIN_COMMAND_DB2
(?, ?, ?, ??, ?, ?, ?, ?, ?, ?, ?, ?)
;
SELECT ' REPAIR SET INDEXSPACE ',
       STRIP(DBNAME)!!'. '!!STRIP(SPACE) ,
       CASE PART WHEN 0 THEN ' '
              ELSE 'PART '!!CHAR(PART)
       END AS PART ,
       ' NOCOPYPEND ; '
FROM SYSIBM.DB_STATUS
;
***** Bottom of Data *****
```

More Output Option

Padding Char ... ==> _	Num Pad.... ==> _
Null Char ==> _	Number..... ==> N (Y/N)
Delimited ==> Y	Result Set. ==> Y (Y/N)
ContChar ==> _	
Generate Sync .. ==> N (N/F/V)	
Value .. ==> 5	(IF F Frequency / IF V Col Num)

- Prepare Only :
 - Seul le PREPARE est exécuté
 - Mise au point d'ordre SQL, Mise en cache
- ;; = END : Termine le flux si detection d'un ordre vide
- ISOLATION : Suffixe de la collection DSNREXXxx
 - Si ISOLATION contient un K
 - ➔ Package DSNREXX bindé avecKEEPDYNAMMC(YES)
 - Pas de PREPARE après commit si ordre avec Parameters Marker exécuté
- SQL DELIM : Changement du Délimiteur SQL
 - CREATE TRIGGER !
- GENERATE SYNC : Génère des points de synchro dans le fichier résultat (-SYNC)
 - F : -SYNC tous les n
 - V : -SYNC à rupture de la nième colonne du select