

Tutorial 5

Datenbankzugriff mit CICS (COBOL)

Dieses Tutorial ist äquivalent zu dem mit C/C++. Es müssen lediglich einige andere Member verwendet werden.

PRAKSET muss durch COBMAP5 ersetzt werden:

```

File Edit Confirm Menu Utilities Compilers Test Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COBMAP5) - 01.01          Columns 00001 00072
*****      ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //PRAKT20M JOB (),CLASS=A,MSGCLASS=H,MSGLEVEL=(1,1),NOTIFY=&SYSUID,
000200 //          REGION=4M
000400 //ASSEM EXEC DFHMAPS,MAPNAME=' COBMAP5',RMODE=24
000700 //COPY.SYSUT1 DD *
000800 COBMAP5 DFHMSD TYPE=MAP,MODE=INOUT,LANG=COBOL2,STORAGE=AUTO, *
000900          TIOAPFX=YES
001000 *   MENU   MAP
001100 MAP05   DFHMDI SIZE=(24,80),CTRL=(PRINT,FREEKB)
001200          DFHMDF POS=(9,13),ATTRB=(ASKIP,NORM),LENGTH=20, *
001300          INITIAL='VORNAME'
001400          DFHMDF POS=(9,34),ATTRB=(ASKIP,NORM),LENGTH=20, *
001500          INITIAL='NACHNAME'
001600 VNAM1   DFHMDF POS=(11,13),ATTRB=(ASKIP,NORM),LENGTH=20
001700 NNAM1   DFHMDF POS=(11,34),ATTRB=(ASKIP,NORM),LENGTH=20
001800 VNAM2   DFHMDF POS=(12,13),ATTRB=(ASKIP,NORM),LENGTH=20
001900 NNAM2   DFHMDF POS=(12,34),ATTRB=(ASKIP,NORM),LENGTH=20
002000 VNAM3   DFHMDF POS=(13,13),ATTRB=(ASKIP,NORM),LENGTH=20
002100 NNAM3   DFHMDF POS=(13,34),ATTRB=(ASKIP,NORM),LENGTH=20
002200 VNAM4   DFHMDF POS=(14,13),ATTRB=(ASKIP,NORM),LENGTH=20
002300 NNAM4   DFHMDF POS=(14,34),ATTRB=(ASKIP,NORM),LENGTH=20
002400          DFHMSD TYPE=FINAL
002500          END
002600 /*
002700 //
Command ==>
          F1=Help      F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel
          Scroll ==> PAGE

```

Abbildung 1: Das BMS-Programm

TESTPR1 muss ersetzt werden durch COB05

```

File Edit Confirm Menu Utilities Compilers Test Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COB05) - 01.01          Columns 00001 00072
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000200          IDENTIFICATION DIVISION.
000300          PROGRAM-ID. COB05.
000400          ENVIRONMENT DIVISION.
000500          DATA DIVISION.
000600          WORKING-STORAGE SECTION.
000700              EXEC SQL
000800                  INCLUDE SQLCA
000900              END-EXEC.
001100          01 NAME-TAB.
001200              02 VORNAME          PICTURE X(20).
001300              02 NACHNAME          PICTURE X(20).
001500          COPY COBMAP5.
001600          LINKAGE SECTION.
001700          PROCEDURE DIVISION.
001800
001900              EXEC SQL
002000                  DECLARE C1 CURSOR FOR
002100                      SELECT VNAME,NNAME FROM PRAKT20.TAB020
002200              END-EXEC.
002300
002400              EXEC SQL OPEN C1 END-EXEC.
002500
002600              EXEC SQL FETCH C1 INTO :VORNAME, :NACHNAME END-EXEC.
002700              MOVE VORNAME TO VNAM1I.
Command ==>
F1=Help      F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel
Scroll ==> PAGE

```

Abbildung 9: Das Business Logic-Programm

```

File Edit Confirm Menu Utilities Compilers Test Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COB05) - 01.01          Columns 00001 00072
002800                MOVE NACHNAME TO NNAM1I.
002900
003000                EXEC SQL  FETCH C1 INTO :VORNAME, :NACHNAME  END-EXEC.
003100                MOVE VORNAME TO VNAM2I.
003200                MOVE NACHNAME TO NNAM2I.
003300
003400                EXEC SQL  FETCH C1 INTO :VORNAME, :NACHNAME  END-EXEC.
003500                MOVE VORNAME TO VNAM3I.
003600                MOVE NACHNAME TO NNAM3I.
003700
003800                EXEC SQL  FETCH C1 INTO :VORNAME, :NACHNAME  END-EXEC.
003900                MOVE VORNAME TO VNAM4I.
004000                MOVE NACHNAME TO NNAM4I.
004100
004200                EXEC SQL  CLOSE C1  END-EXEC.
004300
004400                EXEC CICS SEND MAP('MAP05')
004500                                MAPSET('COBMAP5')
004600                                ERASE
004700                END-EXEC.
004800
004900                GOBACK.
005000
***** ***** Bottom of Data *****

Command ==>                                Scroll ==> PAGE
F1=Help      F3=Exit      F5=Rfind      F6=Rchange  F12=Cancel

```

Abbildung 10: Der zweite Teil des Business Logic-Programms (ersetzen durch ...(cob05) !

PCOMPSQL muss ersetzt werden durch COBDB205

```

File Edit Confirm Menu Utilities Compilers Test Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COBDB205) - 01.01          Columns 00001 00072
*****      ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //PRAKT20D JOB (),CLASS=A,MSGCLASS=H,MSGLEVEL=(1,1),NOTIFY=&SYSUID,
000110 //          REGION=4M
000200 //PCOMP EXEC DB2COB
000300 //DBRMLIB DD DSN=&SYSUID..DBRMLIB.DATA(COB05),DISP=SHR
000400 //SYSCIN DD DSN=&SYSUID..CICSDB2.TEST01(COB05OUT),DISP=SHR
000500 //SYSLIB DD DSN=&SYSUID..CICSDB2.TEST01,DISP=SHR
000600 //SYSIN DD DSN=&SYSUID..CICSDB2.TEST01(COB05),DISP=SHR
*****      ***** Bottom of Data *****

Command ==>
F1=Help      F3=Exit      F5=Rfind      F6=Rchange      F12=Cancel

Scroll ==> PAGE

```

Abbildung 12: Das JCL-Script

STARTSQL muss ersetzt werden durch COBSTA05

```

File  Edit  Confirm  Menu  Utilities  Compilers  Test  Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COBSTA05) - 01.01          Columns 00001 00072
***** ***** Top of Data *****
==MSG> -Warning- The UNDO command is not available until you change
==MSG>          your edit profile using the command RECOVERY ON.
000100 //PRAKT20C JOB (),CLASS=A,MSGCLASS=H,MSGLEVEL=(1,1),NOTIFY=&SYSUID,
000110 //          REGION=4M
000200 //*****
000300 //* TRANSLATE, COMPILE, LINKEDIT
000400 //*****
000500 //COMP EXEC COBCICS
000600 //TRN.SYSIN DD DISP=SHR,DSN=&SYSUID..CICSDB2.TEST01(COB05OUT)
000700 //COB.SYSLIB DD DSN=&SYSUID..LIB,DISP=SHR
000800 //LKED.SYSIN DD *
000900 INCLUDE SYSLIB(DSNCLI)
001000 NAME COB05(R)
001100 /*
001200 //*****
001300 //* BIND
001400 //*****
001500 //BIND EXEC PGM=IKJEFT01
001600 //STEPLIB DD DSN=DSN510.SDSNEXIT,DISP=SHR
001700 // DD DSN=DSN510.SDSNLOAD,DISP=SHR
001800 //DBRMLIB DD DISP=SHR,DSN=&SYSUID..DBRMLIB.DATA
001900 //SYSPRINT DD SYSOUT=*
002000 //SYSTSPRT DD SYSOUT=*
002100 //SYSUDUMP DD SYSOUT=*
002200 //SYSTSIN DD *
002300 DSN S(DBA1)
Command ==>
F1=Help      F3=Exit      F5=Rfind     F6=Rchange   F12=Cancel
Scroll ==> PAGE

```

Abbildung 15: Das JCL-Script (Panel #1)

```

File Edit Confirm Menu Utilities Compilers Test Help
-----
EDIT          PRAKT20.CICSDB2.TEST01(COBSTA05) - 01.01          Columns 00001 00072
002400  BIND  PLAN(PR5) MEMBER(COB05) ACTION(REP) RETAIN ISOLATION(CS)
002500  END
002600  /*
002700  //*****
002800  /* GRANT
002900  //*****
003000  //GRANT EXEC PGM=IKJEFT01
003100  //STEPLIB DD DSN=DSN510.SDSNLOAD,DISP=SHR
003200  //SYSPRINT DD SYSOUT=*
003300  //SYSTSPRT DD SYSOUT=*
003400  //SYSUDUMP DD SYSOUT=*
003500  //SYSTSIN DD *
003600  DSN S(DBA1)
003700  RUN PROGRAM(DSNTIAD) PLAN(DSNTIA51) -
003800  LIBRARY('DSN510.RUNLIB.LOAD')
003900  END
004000  /*
004100  //SYSIN DD *
004200  GRANT EXECUTE ON PLAN PR5 TO PUBLIC
004300  /*
***** ***** Bottom of Data *****

Command ==>
F1=Help      F3=Exit      F5=Rfind     F6=Rchange  F12=Cancel

Scroll ==> PAGE

```

Abbildung 16: Das JCL-Script (Panel#2)