

# B\$DBXC - Create New DBX Database

The B\$DBXC routine can be used to create a new Pervasive SQL or Microsoft SQL format DBX Speedbase database. This routine provides the same functionality as the "Create new DBX database" option of \$DXU.

## 1. Invocation

To create a new Pervasive SQL or Microsoft SQL format DBX Speedbase database code:

```
CALL B$DBXC USING cr
```

where *cr* is a control block of the following format:

```

01  CR
02  CRVERS      PIC 9(4) COMP      * Block version
                                VALUE 1      * This must be set to 1
02  CRSQL       PIC 9 COMP        * 0 - Pervasive SQL
                                * 1 - Microsoft SQL
02  CRDICT      PIC X(5)          * Dictionary name
02  CRDUID      PIC X(3)          * and unit
02  CRSCHE      PIC X(5)          * Schema file name
02  CRSUID      PIC X(3)          * and unit
02  CRSERV      PIC X(47)         * Server name
02  CRPATH      PIC X(60)         * Directory path
02  CRSIZE      PIC 9(7) COMP     * If this is a Microsoft SQL
                                * database which is being
                                * created, you may specify
                                * an initial file size in
                                * Mbytes; otherwise this field
                                * must be set to 0
02  CRNAME      PIC X(23)         * If this is a Microsoft SQL
                                * database then you must set a
                                * database name on creation
02  CRPRTN      PIC PTR           * Mandatory Pointer to progress message
                                * routine which must be set
02  CRDEL       PIC 9 COMP        * Overwrite flag
                                * 0 = Do not overwrite previous version
                                * 1 = Overwrite any previous files

```

If CRNAME is set to spaces for a Microsoft SQL database that is to be created, then the subroutine will create a default name of

SP\_XXXXX\_NNNN\_Dyyyyy\_mm

where :

XXXXX            Speedbase Database Name  
 NNNN            Speedbase DB Generation No.  
 Dyyyyy          BDCF File Name  
 mm              00, 01 etc. to make unique

## 2. STOP Codes and Exception Conditions

The following STOP codes may be generated by B\$DBXC:

| STOP code | Description |
|-----------|-------------|
|           |             |

|       |                                 |
|-------|---------------------------------|
| 25410 | Invalid CR block version number |
| 25411 | Database name not set           |
| 25412 | Server name not supplied        |
| 25413 | Directory path not supplied     |
| 25415 | Incompatible GSM configuration  |

The following exception conditions may be returned by B\$DBXC:

| <b>EXIT code</b> | <b>\$\$COND</b> | <b>Description</b>                                     |
|------------------|-----------------|--|
| 25421            | 21              | Cannot open input dictionary                           |
| 25422            | 22              | Invalid dictionary                                     |
| 25423            | 23              | I/O error on input dictionary                          |
| 25424            | 24              | Cannot create output dictionary                        |
| 25425            | 25              | Unable to open new schema file                         |
| 25426            | 26              | Unable to copy dictionary                              |
| 25427            | 27              | Invalid path name                                      |
| 25428            | 28              | Unable to access server (\$\$CRES contains condition)  |
| 25429            | 29              | Unable to open BDCF file (\$\$CRES contains condition) |

|       |    |   |
|-------|----|---|
| 25430 | 30 | Unable to create BDCF file because of invalid server or directory |
| 25431 | 31 | Unable to create BDCF because of no access to path                |
| 25432 | 32 | I/O error on BDCF file (error code in \$\$CRES)                   |
| 25433 | 33 | Record set without an index                                       |
| 25434 | 34 | BDCF file already exists.   |
| 25487 | 87 | Record too large for SQL  |
| 25488 | 88 | Unable to create database (error in \$\$CRES)                     |
| 25489 | 89 | Interface error closing database (error in \$\$CRES)              |
| 25490 | 90 | Error closing database (error in \$\$CRES)                        |

### 3. Programming Notes

The pointer to the Message Display Routine, CRPRTN, **MUST** be initialised to point to a Progress Message Display Routine that can be used to display 'keep the user happy messages' in whatever form required. If you do not want to display any messages then this routine should simply EXIT. For GSM SP-16, and earlier, **IT IS NOT SUFFICIENT TO SET THE CRPRTN POINTER TO HIGH-VALUES**. For GSM SP-17, and later, this pointer can be set to HIGH-VALUES to indicate that a Progress Message Display Routine is not required. The Progress Message Display Routine entry-point should be coded as follows:

```
ENTRY routine USING ms
```

where *ms* is defined as follows:

```
77 MSNO PIC 9 (4) COMP * Message Number
```

The following Message Numbers are defined:

| Message Number | Meaning                         |
|----------------|---------------------------------|
| 1              | Looking for server              |
| 2              | Creating Microsoft SQL database |

|   |                                 |
|---|---------------------------------|
| 3 | Creating Pervasive SQL database |
| 4 | Closing Microsoft SQL database  |
| 5 | Closing pervasive SQL database  |
| 6 | Generating schema file          |
| 7 | Generating BDCF file            |

**Important Note:** This routine was revised considerably for GSM SP-17. The following changes ensure the CR block for the B\$DBXC routine is compatible with the CR block for the B\$BNC routine:

- The CRVERS field must be set to 1 to indicate a new format CR-block. The GSM SP-17 routine is not backwards compatible so that the version 0 CR-block is invalid and a CRVERS field of 0 will generate a STOP code;
- The format of the CRSIZE field has been changed from PIC 9(6) COMP (version 0) to a PIC 9(7) COMP field (version 1);
- The CRDEL field has been added;
- The CRPROG field has been removed. If a Progress Message Display Routine is not required CRPRTN (formerly CRMRTN) must be set to HIGH-VALUES.

## 4. Examples

None.

## 5. Copy-Books

See copy-book "c\$" in copy-library S.SYS32. Note that this copy-book **MUST** be expanded using a SUBSTITUTING clause. For example:

```
COPY "c$" SUBSTITUTING "CR"
```

## 6. See Also

|         |   |
|---------|---|
| B\$BNC  | Create new non-DBX database               |
| B\$DBXR | Rebuild DBX database                      |
| B\$DBXN | Convert DBX database                      |
| B\$DBXD | Delete DBX database                       |
| B\$DBXP | Change path to DBX database               |
| B\$DBXL | Load pre DBX database to new DBX database |

Note that the \$DXU "Import from C-ISAM dumpset" function is **not** available as a sub-routine.