

# B\$DBXR - Rebuild DBX Database

The B\$DBXR routine can be used to rebuild an existing Pervasive SQL or Microsoft SQL format DBX Speedbase database. This routine provides the same functionality as the "Rebuild database" option of \$DXU.

## 1. Invocation

To rebuild an existing Pervasive SQL or Microsoft SQL format DBX Speedbase database code:

```
CALL B$DBXR USING rb
```

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

```
01  RB
02  RBVERS      PIC 9(4) COMP      * Rebuild block version
                                VALUE 0      * Must be set to 0 or 1
02  RBSCH      PIC X(5)          * Schema file
02  RBSUID      PIC X(3)          * and unit-id
02  RBPROG      PIC 9 COMP        * 0 = No progress message display required
                                * 1 = Display progress messages
02  RBPRTN      PIC PTR          * Pointer to the progress
                                * routine which must be set
                                * if RBPROG = 1
```

## 2. STOP Codes and Exception Conditions

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

STOP code	Description
25414	Invalid RB block version number
25416	Incompatible GSM configuration

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

EXIT code	\$\$COND	Description
25435	35	Unable to exclusively open dictionary
25436	36	Dictionary of wrong type
25437	37	I/O Error on dictionary (the dictionary may be corrupt)
25438	38	I/O Error on schema file (the schema file may be corrupt)

25439	39	Gateway interface error (error code returned in \$\$CRES)
25440	40	Error creating new table/reopening database (error code returned in \$\$CRES)
25441	41	Unable to exclusively open schema file
25442	42	Schema file of invalid type
25443	43	The rebuild operation has suffered an interface error (error code returned in \$\$CRES)
25444	44	Unable to establish communication
25445	45	Unable to open SQL database (error code returned in \$\$CRES)
25446	46	Interface error on close (error code returned in \$\$CRES)
25447	47	Unable to close the database (error code returned in \$\$CRES)

### 3. Programming Notes

If the RBPROG flag is set then RBPRTN **MUST** point to a "Message Display Routine" in the application. This Message Display Routine will be called by B\$DBXR to display any progress messages. The Message Display Routine entry-point must be as follows:-

ENTRY *routine* USING *ms dt*

where *ms* is defined as follows:

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

and *dt* is defined as follows:

```
01  DT
02  DTRCNO       PIC 9(4) COMP          * Record number
02  DTRCID       PIC X(2)              * Record id
02  DTRNAM       PIC X(6)              * Record name
02  DTBLOC       PIC 9(6) COMP          * Block number
02  DTUSED       PIC 9(6) COMP          * Total blocks
```

**Important Note:** The *dt* parameter is only valid for **some** Message Numbers (see below).

The following Message Numbers are defined:

Message Number	Meaning
1	Opening old Pervasive SQL database in read only or step mode (the <i>dt</i> parameter is <b>not</b> valid for this Message Number)
2	Creating new Microsoft SQL database and/or tables (the <i>dt</i> parameter is <b>not</b> valid for this Message Number)
3	Processing file number <i>dtrcno</i> record id/name <i>dtrcid/dtrnam</i> block number <i>dtbloc</i> (the <i>dt</i> parameter <b>is</b> valid for this Message Number)

**Important Note:** This routine was revised for GSM SP-17. The following changes ensure the DT block for the B\$DBXR routine is compatible with the DT block for the B\$BNR routine:

- The RBVERS field can be 1 as well as 0. With this change the RB block for the B\$DBXR routine is compatible with the RB block for the B\$BNR routine.
- The format of the DT-block has been **extensively revised** as follows:

DTRCNO has been changed from PIC 9(4) to PIC 9(4) COMP  
DTBLOC has been changed from PIC 9(6) to PIC 9(6) COMP  
DTUSED has been added

## 4. Examples

None.

## 5. Copy-Books

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

```
COPY "r$" SUBSTITUTING "RB"
```

## 6. See Also

B\$DBXC Create new 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.