DBXUNDO

INTRINSIC NUMBER 422

Rolls back the active sequence of TurboIMAGE/XL procedure calls which are considered a sdynamic transaction.

OPENTURBO vs TurbolMAGE Difference

100%

OPENTURBO Performance Enhancements

N/A.

OPENTURBO Additional Features

2PC Support A.02.00

Syntax

DBXUNDO, { base

baseidlist } ,text,mode,status,textlen

Parameters

base is the name of the array used as the base parameter when opening the database. The first element of the array must contain the base ID returned by DBOPEN. (Refer to DBOPEN for more information about the base ID.) baseidlist Name of the integer array containing the base IDs of the databases which are involved in the DMDBX. Use the same

baseidlist parameter of DBXBEGIN mode 3, when calling DBXUNDO to roll back a DMDBX.

text is an array up to 256 halfwords long that contains user ASCII or binary data to be written to the log file as part of the DBXUNDO log record.

mode Must be a halfword equal to 1 when employing base as the base parameter or 3 when using baseidlist with the matching DBXBEGIN call.

- **Mode 1:** Dynamically roll back DBPUT, DBDELETE, and DBUPDATE intrinsics which completed successfully since the matching DBXBEGIN mode 1 call.
- **Mode 3:** Dynamically roll back DBPUT, DBDELETE, and DBUPDATE intrinsics which completed successfully inside the DMDBX to their respective databases since the matching DBXBEGIN mode 3 call. If user logging is enabled for the databases, mode 3 generates *multiple* entries in the log file, one for each database, in order to mark the roll back of the dynamic transaction.

status is the name of an array of 10 halfwords in which TurboIMAGE/XL returns status information about the procedure. If the procedure executes successfully, the status array contents are as follows:

Element Contents

- 1 If the procedure succeeds, the return status is 0. Table 5-26. describes the contents of element 1 when the procedure does not succeed.
- 2-4 Unchanged from previous procedure call using this array.
- 5-10 Procedure call information. Refer to "Library Procedure Error Messages" in appendix A for a description of this information.

textlen is an integer equal to the number of halfwords to be logged from the text parameter, or is a negative integer equal to the number of bytes. Length can be zero.

Discussion

DBXUNDO is called to dynamically roll back a sequence of TurboIMAGE/XL procedure calls that completed successfully inside a dynamic transaction. The beginning of such a sequence is designated by a previous call to DBXBEGIN. DBXUNDO cannot be called to roll back a transaction started by DBBEGIN or if the database is enabled for AUTODEFER. Logging and DBRECOV are not needed with dynamic transactions, because the database can be recovered dynamically. However, if the calling process is logging, DBXUNDO causes a record to be written to the log file to identify the transaction in the event it needs to be recovered.

CAUTION After DBXUNDO is called, the current record pointer, current path, current list, and chronological order prior to the call to DBXBEGIN may not be restored.

DBXUNDO cannot be called to roll back a transaction started by DBBEGIN. DBXUNDO returns an error condition if it is called without a prior matching call to DBXBEGIN. DBXEND is not necessary after DBXUNDO. DBXUNDO rolls back the entire transaction, and then transactions continue according to the logic of the program. In general, DBXUNDO or DBXEND must be the last intrinsic for a dynamic transaction to be executed. It designates the end of that dynamic transaction.

Table 5-26. DBXUNDO Return Status Values

File System, Memory Management, and Transaction Management Failures:	-215	XM error <i>nn</i> encountered when rolling out dynamic transaction.
Calling Errors:	-11	Bad database reference.
	-31	Bad (unrecognized) DBXUNDO mode n.
	-140	Bad baseid list.
	-151	Text length greater than 512 bytes.
	-218	Output deferred is incompatible with Dynamic Rollback.
	-219	Remote database access is incompatible with Dynamic Rollback.
	-223	Cannot DBXEND or DBXUNDO a transaction which was not active.
	-237	Cannot DBXEND or DBXUNDO a DBBEGIN transaction.
	-238	MDBX DBXBEGIN, DBXEND mode mismatch.
	-240	MDBX mode mismatch.
Logging System Failures:	-111	WRITELOG failure.
Exceptional Conditions:	-231	During DBX recovery, internal procedure failed; error nn.
	-242	Error in TurboGTX file operation.
	-332	Error in QLOCK table operation.
	67	DBU disabled; potential damage; only DBCLOSE allowed.

Consult appendix A for more information about these conditions.