

NDB - ROLLBACK

Further details and syntax: ROLLBACK in Natural SQL Statements in the Natural Statements documentation.

The SQL ROLLBACK statement undoes all database modifications made since the beginning of the last logical transaction. Logical transactions can start either after the beginning of a session or after the last COMMIT/END TRANSACTION or ROLLBACK/BACKOUT TRANSACTION statement. All records held during the transaction are released.

ROLLBACK is a synonym for the Natural statement BACKOUT TRANSACTION as described in the section Natural DML Statements.

If this command is executed from a Natural stored procedure or user-defined function (UDF), Natural for DB2 executes the underlying rollback operation. This sets the caller into a must-rollback state. If this command is executed by Natural error processing (implicit ROLLBACK), Natural for DB2 does not execute the underlying rollback operation, thus allowing the caller to receive the original Natural error.

Under CICS, the ROLLBACK statement is translated into an EXEC CICS ROLLBACK command. However, if the file server is used, only changes made to the database since the last terminal I/O are undone. This is due to CICS-specific transaction processing in pseudo-conversational mode.

Under IMS TM, the ROLLBACK statement is translated into an IMS Rollback (ROLB) command. However, only changes made to the database since the last terminal I/O are undone. This is due to IMS TM-specific transaction processing.

As all cursors are closed when a logical unit of work ends, a ROLLBACK statement must not be placed within a database loop; instead, it has to be placed outside such a loop or after the outermost loop of nested loops.

If an external program written in another standard programming language is called from a Natural program, this external program must not contain its own ROLLBACK command if the Natural program issues database calls, too. The calling Natural program must issue the ROLLBACK statement for the external program.