BACKOUT TRANSACTION

BACKOUT [TRANSACTION]

This chapter covers the following topics:

- Function
- Restriction
- Database-Specific Considerations
- Example

For an explanation of the symbols used in the syntax diagram, see *Syntax Symbols*.

Related Statements: ACCEPT/REJECT | AT BREAK | AT START OF DATA | AT END OF DATA |
BEFORE BREAK PROCESSING | DELETE | END TRANSACTION | FIND | GET | GET SAME | GET
TRANSACTION DATA | HISTOGRAM | LIMIT | PASSW | PERFORM BREAK PROCESSING |
READ | RETRY | STORE | UPDATE

Belongs to Function Group: Database Access and Update

Function

The BACKOUT TRANSACTION statement is used to back out all database updates performed during the current logical transaction. This statement also releases all records held during the transaction.

The statement is executed only if a database transaction under control of Natural has taken place. For which databases the statement is executed depends on the setting of the profile parameter ET (execution of END/BACKOUT TRANSACTION statements):

- If ET=OFF, the statement is executed only for the database affected by the transaction.
- If ET=ON, the statement is executed for all databases that have been referenced since the last execution of a BACKOUT TRANSACTION or END TRANSACTION statement.

Backout Transaction Issued by Natural

If the user interrupts the current Natural operation with a terminal command (command %% or CLEAR key), Natural issues a BACKOUT TRANSACTION statement.

See also the terminal command %% in the *Terminal Commands* documentation.

Additional Information

For additional information on the use of the transaction backout feature, see the sections *Database Update* - *Transaction Processing* and *Backing Out a Transaction* in the *Programming Guide*.

Restriction

This statement is not available with Entire System Server.

Database-Specific Considerations

DL/I Databases	Because PSB scheduling is terminated by a syncpoint request, Natural saves the PSB position before executing the BACKOUT TRANSACTION statement. Before the next command execution, Natural re-schedules the PSB and tries to set the PCB position as it was before the backout. The PCB position might be shifted forward if any pointed segment had been deleted in the time period between the backout and the following command.
SQL Databases	As most SQL databases close all cursors when a logical unit of work ends, a BACKOUT TRANSACTION statement must not be placed within a database modification loop; instead, it has to be placed after such a loop.

Example

```
** Example 'BOTEX1': BACKOUT TRANSACTION
** CAUTION: Executing this example will modify the database records!
DEFINE DATA LOCAL
1 EMPLOY-VIEW VIEW OF EMPLOYEES
 2 NAME
 2 DEPT
 2 LEAVE-DUE
 2 LEAVE-TAKEN
1 #DEPT (A6)
1 #RESP (A3)
END-DEFINE
LIMIT 3
INPUT 'DEPARTMENT TO BE UPDATED:' #DEPT
IF \#DEPT = ' '
 STOP
END-IF
FIND EMPLOY-VIEW WITH DEPT = #DEPT
 IF NO RECORDS FOUND
   REINPUT 'NO RECORDS FOUND'
 END-NOREC
  INPUT 'NAME: ' NAME (AD=O) /
       'LEAVE DUE: ' LEAVE-DUE (AD=M) /
       'LEAVE TAKEN:' LEAVE-TAKEN (AD=M)
 UPDATE
END-FIND
INPUT 'UPDATE TO BE PERFORMED? YES/NO:' #RESP
DECIDE ON FIRST #RESP
 VALUE 'YES'
   END TRANSACTION
```

```
VALUE 'NO'
BACKOUT TRANSACTION
NONE
REINPUT 'PLEASE ENTER YES OR NO'
END-DECIDE
*
END
```

Output of Program BOTEX1:

DEPARTMENT TO BE UPDATED: MGMT30

Result for department MGMT30:

NAME: POREE LEAVE DUE: 45 LEAVE TAKEN: 31

Confirmation query:

UPDATE TO BE PERFORMED YES/NO: NO