

NAME

BEGIN – start a transaction block

SYNOPSIS

BEGIN [WORK | TRANSACTION] [*transaction_mode* [, ...]]

where *transaction_mode* is one of:

ISOLATION LEVEL { SERIALIZABLE | REPEATABLE READ | READ COMMITTED | READ UNCOMMITTED }
READ WRITE | READ ONLY
[NOT] DEFERRABLE

DESCRIPTION

BEGIN initiates a transaction block, that is, all statements after a **BEGIN** command will be executed in a single transaction until an explicit **COMMIT** or **ROLLBACK** is given. By default (without **BEGIN**), PostgreSQL executes transactions in “autocommit” mode, that is, each statement is executed in its own transaction and a commit is implicitly performed at the end of the statement (if execution was successful, otherwise a rollback is done).

Statements are executed more quickly in a transaction block, because transaction start/commit requires significant CPU and disk activity. Execution of multiple statements inside a transaction is also useful to ensure consistency when making several related changes: other sessions will be unable to see the intermediate states wherein not all the related updates have been done.

If the isolation level, read/write mode, or deferrable mode is specified, the new transaction has those characteristics, as if **SET TRANSACTION** was executed.

PARAMETERS

WORK

TRANSACTION

Optional key words. They have no effect.

Refer to SET TRANSACTION (**SET_TRANSACTION(7)**) for information on the meaning of the other parameters to this statement.

NOTES

START TRANSACTION has the same functionality as **BEGIN**.

Use **COMMIT** or **ROLLBACK** to terminate a transaction block.

Issuing **BEGIN** when already inside a transaction block will provoke a warning message. The state of the transaction is not affected. To nest transactions within a transaction block, use savepoints (see **SAVEPOINT(7)**).

For reasons of backwards compatibility, the commas between successive *transaction_modes* can be omitted.

EXAMPLES

To begin a transaction block:

BEGIN;

COMPATIBILITY

BEGIN is a PostgreSQL language extension. It is equivalent to the SQL-standard command **START TRANSACTION**, whose reference page contains additional compatibility information.

The DEFERRABLE *transaction_mode* is a PostgreSQL language extension.

Incidentally, the BEGIN key word is used for a different purpose in embedded SQL. You are advised to be careful about the transaction semantics when porting database applications.

SEE ALSO

COMMIT(7), **ROLLBACK**(7), **START TRANSACTION** (**START_TRANSACTION**(7)),
SAVEPOINT(7)