

NAME

CREATE_TABLESPACE – define a new tablespace

SYNOPSIS

```
CREATE TABLESPACE tablespace_name
  [ OWNER { new_owner | CURRENT_ROLE | CURRENT_USER | SESSION_USER } ]
  LOCATION 'directory'
  [ WITH ( tablespace_option = value [, ... ] ) ]
```

DESCRIPTION

CREATE TABLESPACE registers a new cluster-wide tablespace. The tablespace name must be distinct from the name of any existing tablespace in the database cluster.

A tablespace allows superusers to define an alternative location on the file system where the data files containing database objects (such as tables and indexes) can reside.

A user with appropriate privileges can pass *tablespace_name* to **CREATE DATABASE**, **CREATE TABLE**, **CREATE INDEX** or **ADD CONSTRAINT** to have the data files for these objects stored within the specified tablespace.

Warning

A tablespace cannot be used independently of the cluster in which it is defined; see Section 22.6.

PARAMETERS*tablespace_name*

The name of a tablespace to be created. The name cannot begin with pg_, as such names are reserved for system tablespaces.

user_name

The name of the user who will own the tablespace. If omitted, defaults to the user executing the command. Only superusers can create tablespaces, but they can assign ownership of tablespaces to non-superusers.

directory

The directory that will be used for the tablespace. The directory must exist (**CREATE TABLESPACE** will not create it), should be empty, and must be owned by the PostgreSQL system user. The directory must be specified by an absolute path name.

tablespace_option

A tablespace parameter to be set or reset. Currently, the only available parameters are *seq_page_cost*, *random_page_cost*, *effective_io_concurrency* and *maintenance_io_concurrency*. Setting these values for a particular tablespace will override the planner's usual estimate of the cost of reading pages from tables in that tablespace, and how many concurrent I/Os are issued, as established by the configuration parameters of the same name (see *seq_page_cost*, *random_page_cost*, *effective_io_concurrency*, *maintenance_io_concurrency*). This may be useful if one tablespace is located on a disk which is faster or slower than the remainder of the I/O subsystem.

NOTES

CREATE TABLESPACE cannot be executed inside a transaction block.

EXAMPLES

To create a tablespace dbspace at file system location /data/dbs, first create the directory using operating system facilities and set the correct ownership:

```
mkdir /data/dbs
chown postgres:postgres /data/dbs
```

Then issue the tablespace creation command inside PostgreSQL:

```
CREATE TABLESPACE dbspace LOCATION '/data/dbs';
```

To create a tablespace owned by a different database user, use a command like this:

```
CREATE TABLESPACE indexspace OWNER genevieve LOCATION '/data/indexes';
```

COMPATIBILITY

CREATE TABLESPACE is a PostgreSQL extension.

SEE ALSO

CREATE DATABASE (**CREATE_DATABASE**(7)), CREATE TABLE (**CREATE_TABLE**(7)), CREATE INDEX (**CREATE_INDEX**(7)), DROP TABLESPACE (**DROP_TABLESPACE**(7)), ALTER TABLESPACE (**ALTER_TABLESPACE**(7))