# **PostgreSQL – Copy Database**

<https://www.geeksforgeeks.org/postgresql-copy-database/>

In this article we will discuss the process of copying a PostgreSQL database on the same server or from a server to another.

**PostgreSQL copy database within the same server:**

If a situation arises where one needs to copy a PostgreSQL database within a database server for testing purposes. PostgreSQL makes it simple to do so using the CREATE DATABASE statement as follows:

**Syntax:**

CREATE DATABASE targetdb WITH TEMPLATE sourcedb;

This statement copies the sourcedb to the targetdb. For instance, to copy the dvdrental sample database which is described [here](https://www.geeksforgeeks.org/postgresql-loading-a-database/)and can be downloaded from [here](https://github.com/imkumaraju/dvdrenat-sample-databse), to the dvdrental\_test database, you use the following statement:

CREATE DATABASE dvdrental\_test

WITH TEMPLATE dvdrental;

It may take a while to complete copying depending upon the size of the original database.

**PostgreSQL copy database from a server to another:**

There are many ways to copy a database between various PostgreSQL database servers. If the source database is large and the connection between servers is relatively slower, you can dump the source database to a file, copy the file to the remote server, and restore it. To do so the following commands need to be followed:

* Step 1: Dump the source database to a file.

pg\_dump -U postgres -O sourcedb sourcedb.sql

* Step 2: Copy the dump file to the remote server.
* Step 3: Create a new database in the remote server:

CREATE DATABASE targetdb;

* Step 4: Restore the dump file on the remote server:

psql -U postgres -d targetdb -f sourcedb.sql

**Example:**  
Here we will copy the dvdrental database from the local server to the remote server.

(1) we will dump the dvdrental database into a dump file e.g., dvdrental.sql:

pg\_dump -U postgres -f dvdrental.sql dvdrental

(2) we will copy the dump file to a remote server.

(3) we will create the dvdrental database on the remote server:

CREATE DATABASE dvdrental;

(4) we will restore the dvdrental.sql dump file in the remote server:

psql -U postgres -d dvdrental -f dvdrental.sql

If the connection between servers is fast and the size of the database is not big, you can use the following command:

pg\_dump -C -h local -U localuser sourcedb | psql -h remote -U remoteuser targetdbpg\_dump

If one desires to copy the dvdrental database from the localhost server to the remote server, you do it as follows:

pg\_dump -C -h localhost -U postgres dvdrental | psql -h remote -U postgres dvdrental