



English ▾

PostgreSQL Copy Table With Practical Examples

VIETNAMESE

Bảng sao chép PostgreSQL với các ví dụ thực tế

EXTENSION OPTIONS MORE »

A white rectangular overlay box is centered over the landscape. It contains text in English and Vietnamese. At the top left is a dropdown menu set to "English". Below it is the title "PostgreSQL Copy Table With Practical Examples". Underneath that is the Vietnamese translation "Bảng sao chép PostgreSQL với các ví dụ thực tế". At the bottom left is a link "EXTENSION OPTIONS" and at the bottom right is a link "MORE »".

PostgreSQL Copy Table With Practical Examples

- ⌚ Sept. 20, 2022, 9:19 p.m.
- 👤 [Talha Saif Malik](#)
- RSS [Follow](#)
- 👉 [OpenSource Postgres](#)

PostgreSQL allows us to copy an existing table with or without data. In Postgres, either you can copy only the structure of an existing table, or you can copy a table completely along with its data. To copy only the table's structure, you must specify a WITH NO DATA clause.

This write-up will demonstrate how to copy a table with or without data in PostgreSQL. So, let's start.

PostgreSQL: How to Copy a Table?

Let's learn how to copy the table's data in PostgreSQL. To do this, firstly, you need to understand the following syntax:

```
CREATE TABLE new_tab_name AS  
TABLE existing_tab_name;
```

By following the above syntax, the data of the existing table will be copied to the new table.

Example: How to Copy Entire Table's Data in Postgres?

We have created a student_info table whose details are shown in the following snippet:

```
SELECT * FROM student_info;
```

The screenshot shows the pgAdmin 4 interface connected to a PostgreSQL 14 database. The query editor contains the SQL command `SELECT * FROM student_info;`. Below the editor, the 'Data output' tab is selected, displaying the contents of the `student_info` table. The table has three columns: `std_id` (smallint), `std_age` (smallint), and `std_name` (text). The data consists of 10 rows, each with a unique `std_id` from 1 to 10, an `std_age` between 17 and 20, and a corresponding `std_name`.

	std_id	std_age	std_name
1	1	18	Mike
2	2	17	Joe
3	3	19	Ambrose
4	4	18	Natalia
5	5	17	Stephanie
6	6	18	Michael
7	7	19	John
8	8	20	Naomi
9	9	20	Trish
10	10	18	Jordan

Let's run the following query to copy the data of the `student_info` table to a new table named `student_record`:

```
CREATE TABLE student_record AS
TABLE student_info;
```

The screenshot shows the pgAdmin 4 interface connected to a PostgreSQL 14 database. The query editor contains the SQL command `CREATE TABLE student_record AS TABLE student_info;`. Below the editor, the 'Messages' tab is selected, showing the message `Query returned successfully in 100 msec.` This indicates that the table `student_record` was successfully created as a copy of the `student_info` table.

Let's run the `SELECT` command to fetch all the records of the newly created `student_record` table:

```
SELECT * FROM student_record;
```

The screenshot shows a pgAdmin 4 interface with a query editor and a data output viewer. The query editor contains the command: `SELECT * FROM student_record;`. The data output viewer displays a table with 10 rows of student information:

	std_id	std_age	std_name
1	1	18	Mike
2	2	17	Joe
3	3	19	Ambrose
4	4	18	Natalia
5	5	17	Stephanie
6	6	18	Michael
7	7	19	John
8	8	20	Naomi
9	9	20	Trish
10	10	18	Jordan

From the output, it is clear that all the records of student_info have been copied to the student_record table.

How to Copy Only Specific Table's Record in PostgreSQL?

To partially copy the data of one table to another, use the WHERE clause as follows:

```
CREATE TABLE new_tab_name AS
SELECT * FROM existing_tab_name
WHERE condition;
```

By following the above syntax, only those records will be copied to the new table, which satisfies the given condition.

Example: How to Copy Partial Data From a Table?

Suppose we want to copy the details of only those students who are above 18 years. To do so, we will copy the specific records from the student_info table to the selected_student table as follows:

```
CREATE TABLE selected_student AS
SELECT * FROM student_info
WHERE std_age > 18;
```

The screenshot shows a pgAdmin 4 interface with a query editor and a data output viewer. The query editor contains the commands:

```
1 CREATE TABLE selected_student AS
2 SELECT * FROM student_info
3 WHERE std_age > 18;
```

The data output viewer shows the result of the last command:

```
SELECT 4
```

Query returned successfully in 306 msec.

Let's execute the SELECT command to fetch the filtered/copied data:

```
SELECT * FROM selected_student;
```

The screenshot shows the pgAdmin 4 interface with a connection to 'example/postgres@PostgreSQL 14'. A query window is open with the following SQL statement:

```
1 SELECT * FROM selected_student;
```

The results pane displays the data from the 'selected_student' table:

	std_id	std_age	std_name
1	3	19	Ambrose
2	7	19	John
3	8	20	Naomi
4	9	20	Trish

The output shows that partial data has been copied to the selected_student table.

How to Copy Only Table's Structure in PostgreSQL?

If you need to copy the table's structure without copying the table's data, then you have to use the WITH NO DATA clause as follows:

```
CREATE TABLE new_tab_name AS
TABLE existing_tab_name
WITH NO DATA;
```

Let's implement it practically to get more clarity.

Example: How to Copy Only Structure of a Table in Postgres?

Suppose we have to copy only the table's structure; to do that, we will use the WITH NO DATA clause as follows:

```
CREATE TABLE student AS
TABLE student_info
WITH NO DATA;
```

The screenshot shows the pgAdmin 4 interface with a connection to 'example/postgres@PostgreSQL 14'. A query window is open with the following SQL statements:

```
1 CREATE TABLE student AS
2 TABLE student_info
3 WITH NO DATA;
```

The results pane shows the output of the CREATE TABLE statement:

```
CREATE TABLE AS
Query returned successfully in 107 msec.
```

Let's utilize the SELECT statement to see the structure of the student table:

```
SELECT * FROM student;
```

```

example/postgres@PostgreSQL 14
No limit
Query History
1 SELECT * FROM student;

Data output Messages Notifications
std_id std_age std_name
smallint smallint text

```

The output authenticates that the structure of the student_info table has been successfully copied to the student table.

Conclusion

PostgreSQL allows us to copy an existing table with or without data. In Postgres, either you can copy only the structure of an existing table, or you can copy a table completely along with its data. You can also copy partial data of a table using the WHERE clause. To copy only the table's structure, you must specify a WITH NO DATA clause. This post considered various examples to explain how to copy a table in PostgreSQL.

Get Postgres Help!

FEATURES	CONSULTING	SLA	PROACTIVE
Enterprise Wide 24 x 7 x 365	✓	✓	✓
Service Level Agreement		✓	✓
Postgres and Full Stack Professional Services	✓	✓	✓
Monthly* billing cycle	✓	✓	✓
Fixed hourly rate	✓	✓	✓
Priority Response		✓	✓
Immunity from after hours and emergency rates		✓	✓
Advanced monitoring			✓
Four Hours of Professional Services or Support			✓

*discounted quarterly and annual options are available

Podcasts

A photograph of a person running up a steep, rocky hillside. The person is wearing a dark tank top and shorts, and is captured mid-stride. The hillside is made of light-colored, layered rock. The sky is clear and blue.

More than a refresh



ON THE FLIP SIDE



A Podcast
about
funerals,
books, and
the essentials
of brushing
your teeth

By
Lindsay Rae Hooper &
Amanda Nystrom

Recent blogs

[PostgreSQL LENGTH\(\) Function With Practical Examples](#)

May 9, 2024, 5:57 a.m.

[Talha Saif Malik](#)

[How to Show Databases in PostgreSQL](#)

May 6, 2024, 5:44 p.m.

[Talha Saif Malik](#)

[How to Create a Database in PostgreSQL](#)

May 2, 2024, 2:29 p.m.

[Talha Saif Malik](#)

[How to Install PostgreSQL \(psql\) on Arch Linux](#)

May 2, 2024, 6:02 a.m.

[Talha Saif Malik](#)

[How to Use LIMIT Clause in PostgreSQL](#)

May 1, 2024, 7:12 p.m.

[Talha Saif Malik](#)

[How to Install PostgreSQL on Ubuntu 24.04](#)

May 1, 2024, 8:49 a.m.

[Talha Saif Malik](#)

[How to Use RENAME TABLE Statement in PostgreSQL](#)

April 29, 2024, 5:10 p.m.

[Talha Saif Malik](#)

[PostgreSQL TIME Data Type With Examples](#)

April 29, 2024, 5:07 a.m.

[Talha Saif Malik](#)

Connect with us



Copyright © 2000-2024 Command Prompt, Inc. All Rights Reserved. All trademarks property of their respective owners.

[Terms of Use](#) [Privacy Policy](#)