

How to Install PostgreSQL and phpPgAdmin on Ubuntu 16.04

Source: <https://www.howtoforge.com/tutorial/ubuntu-postgresql-installation/>

PostgreSQL or Postgres is a powerful high-performance object-relational database management system (ORDBMS) released under a flexible BSD-style license. PostgreSQL is well suited for large databases and has many advanced features.

PostgreSQL is available for many operating systems including Linux, FreeBSD, Solaris, and Microsoft Windows.

PhpPgAdmin is a PHP-based web application for managing PostgreSQL databases. With Phppgadmin, it is easy to create a database, create a role and create tables in Postgres.

This tutorial will show the installation of PostgreSQL and its web-based administration interface phpPgAdmin on Ubuntu 16.04. I will use the Ubuntu minimal server as basis for this setup.

Prerequisites

- Ubuntu Server 16.04.
- Root/Sudo access.
- What we will do in this tutorial:
- Install PostgreSQL, phpPgAdmin and Apache2.
- Configure a PostgreSQL User.
- Configure Apache2.
- Configure phpPgAdmin.
- Testing.

Step 1 - Installing PostgreSQL, phpPgAdmin and Apache2

PostgreSQL and PhpPgAdmin are available in the Ubuntu repository. So you just need to install them with the apt command.

```
$ sudo apt-get -y install postgresql postgresql-contrib phppgadmin
```

The above command will automatically install all packages needed by PostgreSQL, like Apache, PHP etc.

Step 2 - Configure PostgreSQL user

PostgreSQL uses role for user authentication and authorization, it just like Unix-Style permissions. By default, PostgreSQL creates a new user called "postgres" for basic authentication. To use PostgreSQL, you need to login to the "postgres" account, you can do that by typing:

```
$ sudo su
$ su - postgres
```

Now you can access the PostgreSQL prompt with the command:

```
$ psql
```

And then change the password for postgres role by typing:

```
\password postgres
ENTER YOUR PASSWORD
```

Then enter \q to leave the psql command line.

```
administrator@server1:~$ sudo su
root@server1:/home/administrator# su - postgres
postgres@server1:~$ psql
psql (9.5.3)
Type "help" for help.

postgres=# \password
Enter new password:
Enter it again:
postgres=# \q
postgres@server1:~$
```

Run the command "exit" to leave the postgres user and become root again.

```
$ exit
```

Step 3 - Configure Apache2

You need to configure apache for phpPgAdmin. Edit the file /etc/apache2/conf-available/phppgadmin.conf with nano by typing:

```
cd /etc/apache2/conf-available/  
nano phppgadmin.conf
```

Comment out the line #Require local by adding a # in front of the line and add below the line allow from all so that you can access from your browser.

```
# Only allow connections from localhost:  
# Require local  
Allow From all
```

Step 4 - Configure phpPgAdmin

Edit the file /etc/phppgadmin/config.inc.php by typing :

```
cd /etc/phppgadmin/  
nano config.inc.php
```

Find the line \$conf['extra_login_security'] = true; and change the value to false so you can login to phpPgAdmin with user postgres.

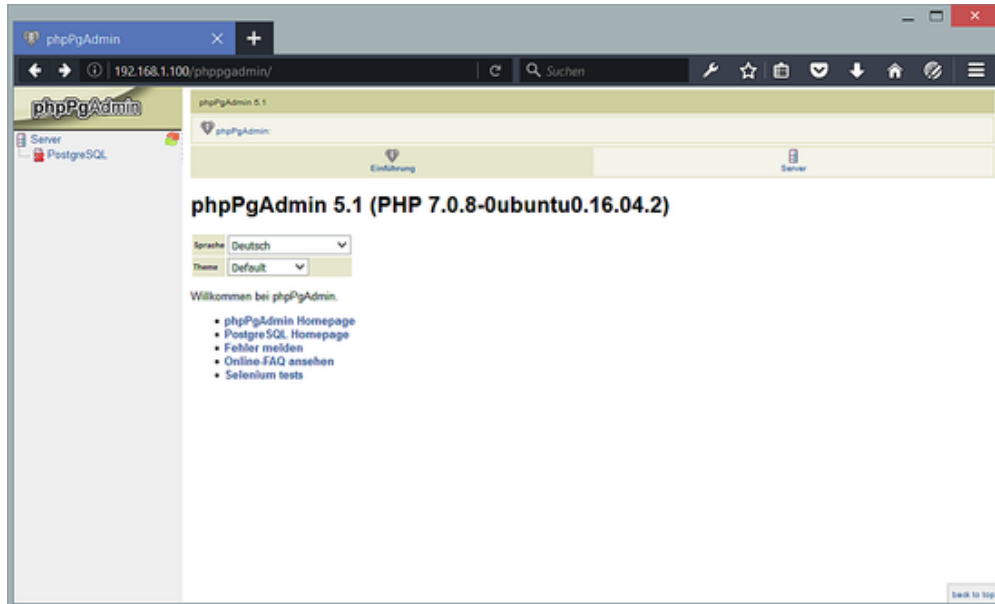
```
// If extra login security is true, then logins via phpPgAdmin with no  
// password or certain usernames (pgsql, postgres, root, administrator)  
// will be denied. Only set this false once you have read the FAQ and  
// understand how to change PostgreSQL's pg_hba.conf to enable  
// passworded local connections.  
$conf['extra_login_security'] = false;
```

Step 5 - Restart PostgreSQL and Apache2

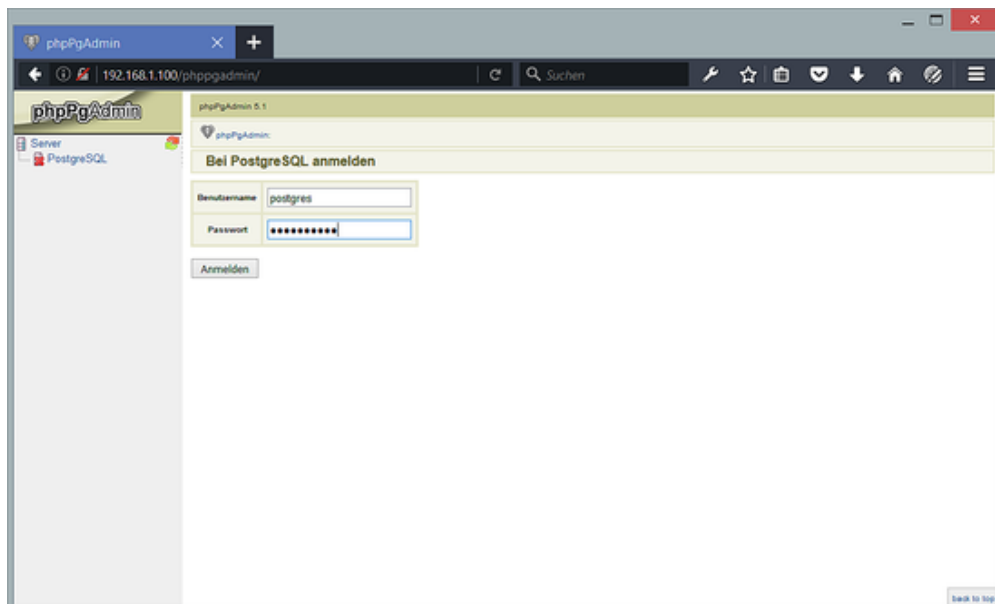
```
systemctl restart postgresql
systemctl restart apache2
```

Step 6 – Testing

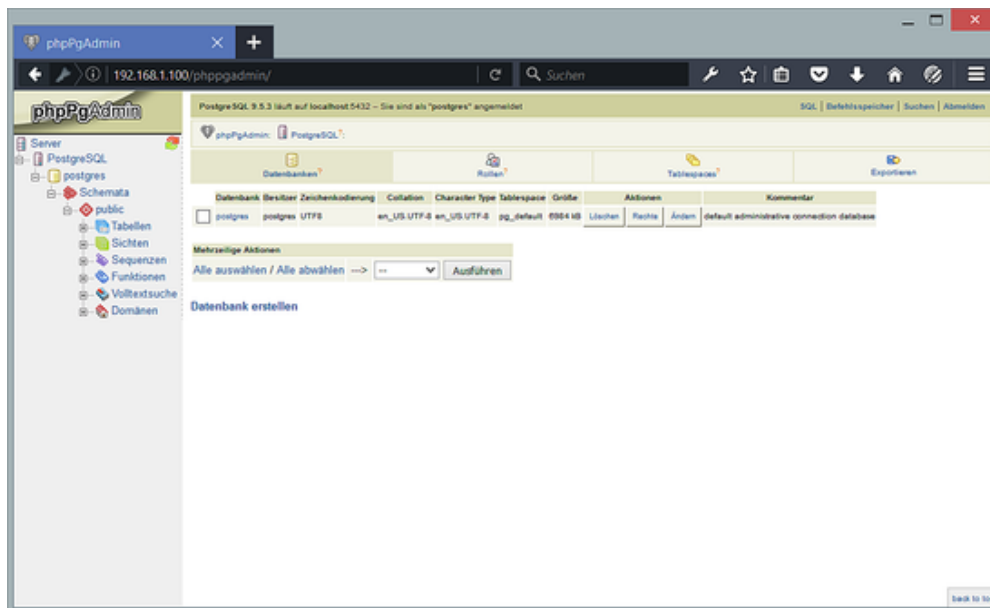
Now access phpPgAdmin with your browser *http://yourip/phppgadmin/*.



and then try login to with user *postgres* and your password.



After logging in you will get this interface:



Conclusion

PostgreSQL is an advanced object-relational database management system (ORDBMS), it is Open Source and has a large and active Community. PostgreSQL provides the *psql* command line program as primary front-end, which can be used to enter SQL queries directly, or execute them from a file. phpPgAdmin is a web-based administration tool for PostgreSQL written in PHP that makes the administration of Postgres databases easier.