

Bitácora

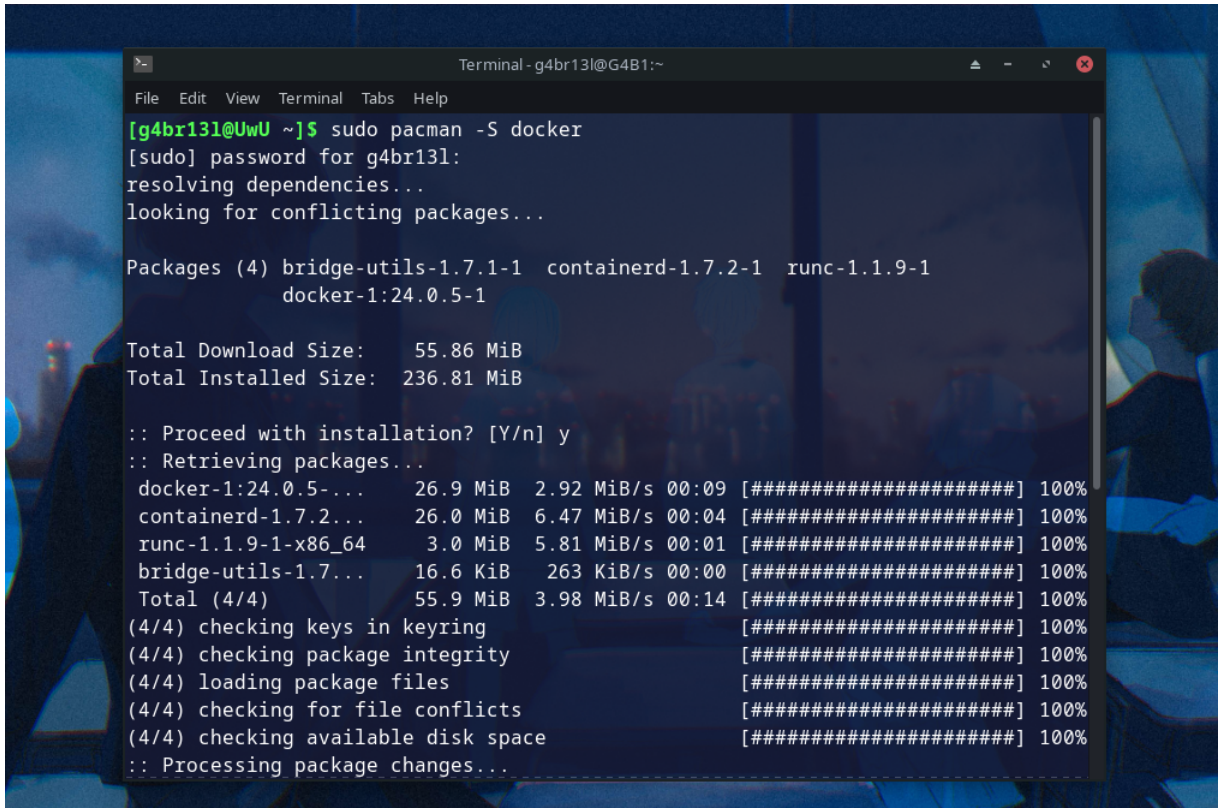
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- **Sistema operativo:** Linux
- **Distribución:** Manjaro
- **Versión de la instalación:** Docker 24.0.5
- **Tiempo requerido:** 30 minutos

- Proceso de instalación:

Primero instalé Docker con el comando **sudo pacman -S docker**:

A terminal window titled "Terminal - g4br13l@G4B1:~" showing the command "sudo pacman -S docker" being executed. The terminal output shows the resolution of dependencies, the packages to be installed (bridge-utils, containerd, runc, and docker), the total download and installed sizes, and a progress bar for each package. The installation is confirmed with a 'y' response to the prompt "Proceed with installation?".

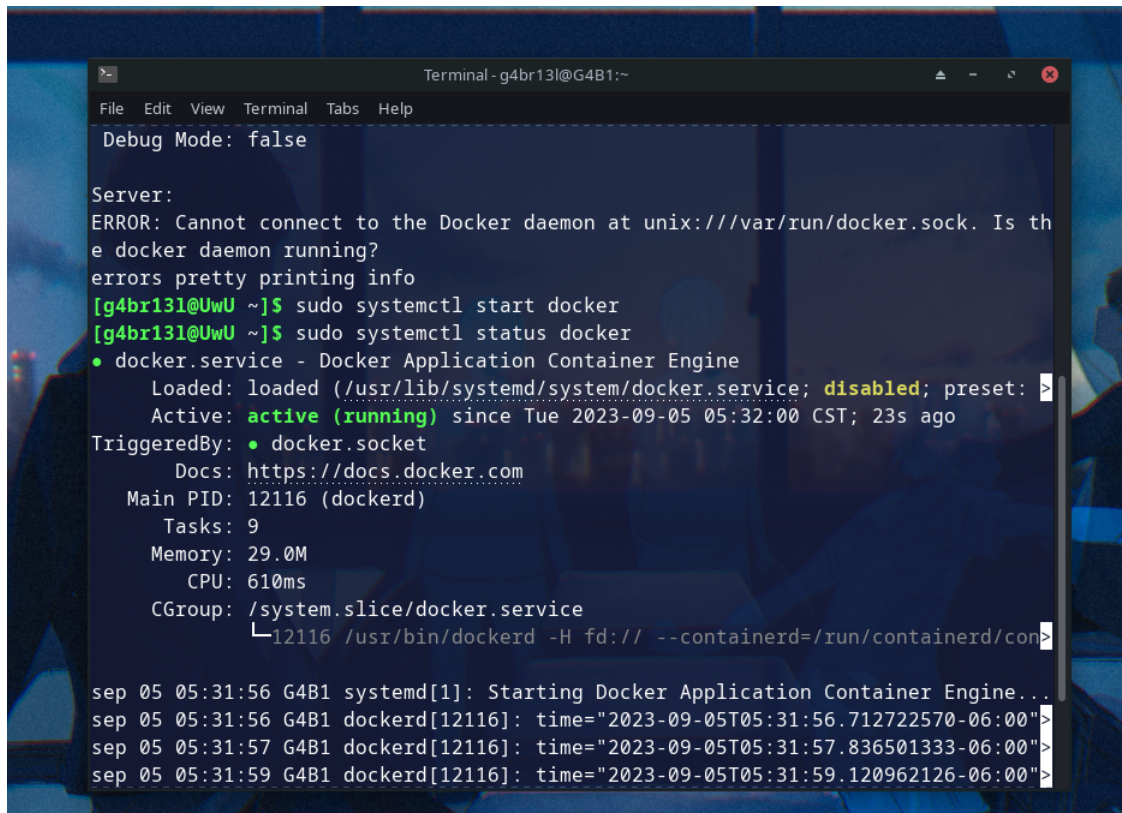
```
Terminal - g4br13l@G4B1:~
File Edit View Terminal Tabs Help
[g4br13l@UwU ~]$ sudo pacman -S docker
[sudo] password for g4br13l:
resolving dependencies...
looking for conflicting packages...

Packages (4) bridge-utils-1.7.1-1  containerd-1.7.2-1  runc-1.1.9-1
              docker-1:24.0.5-1

Total Download Size:   55.86 MiB
Total Installed Size: 236.81 MiB

:: Proceed with installation? [Y/n] y
:: Retrieving packages...
docker-1:24.0.5-... 26.9 MiB 2.92 MiB/s 00:09 [#####] 100%
containerd-1.7.2... 26.0 MiB 6.47 MiB/s 00:04 [#####] 100%
runc-1.1.9-1-x86_64 3.0 MiB 5.81 MiB/s 00:01 [#####] 100%
bridge-utils-1.7... 16.6 KiB 263 KiB/s 00:00 [#####] 100%
Total (4/4)         55.9 MiB 3.98 MiB/s 00:14 [#####] 100%
(4/4) checking keys in keyring [#####] 100%
(4/4) checking package integrity [#####] 100%
(4/4) loading package files [#####] 100%
(4/4) checking for file conflicts [#####] 100%
(4/4) checking available disk space [#####] 100%
:: Processing package changes...
```

Después de instalar Docker probé el comando **sudo docker run hello-world** pero daba un error, investigando encontré que tenía que iniciar el servicio con el comando **sudo systemctl start docker** despues verifiqué el servicio con el comando **sudo systemctl status docker**:

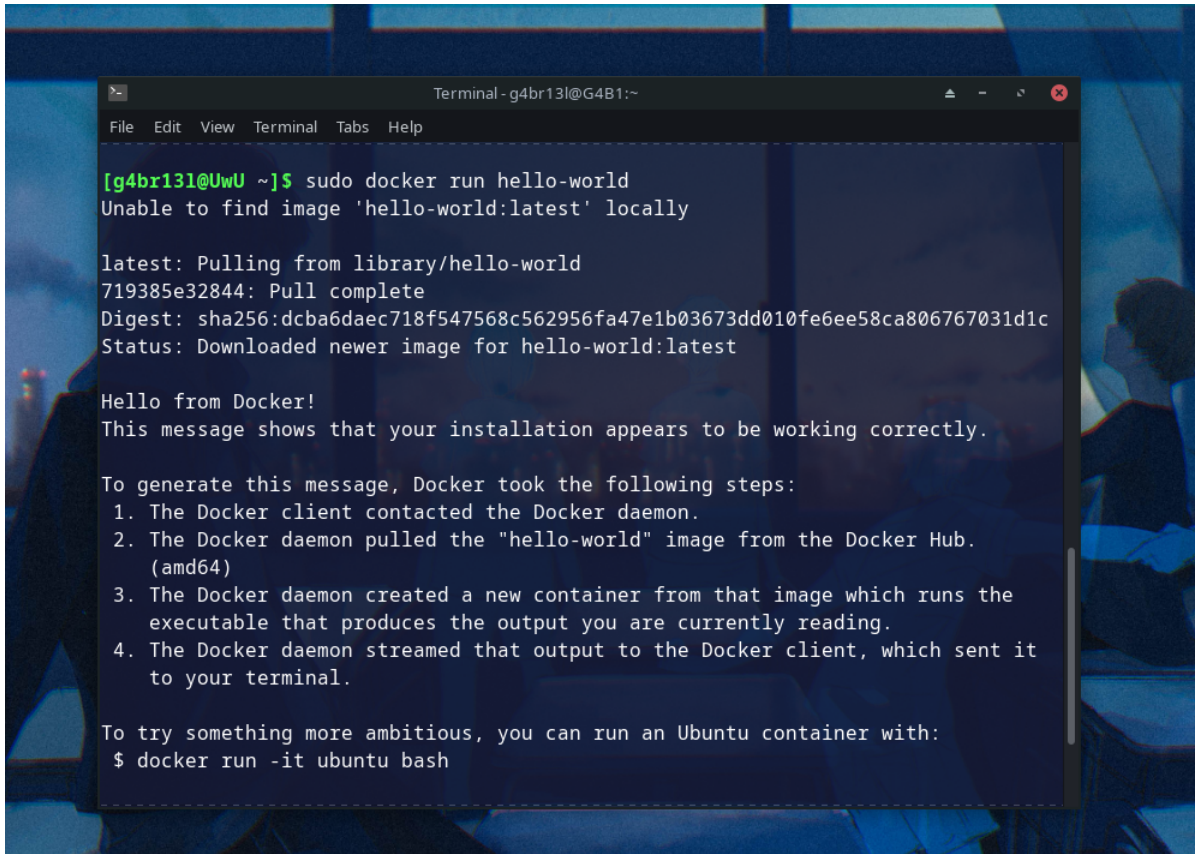
A terminal window titled "Terminal - g4br13l@G4B1:~" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The terminal shows the output of "sudo systemctl status docker". It starts with "Debug Mode: false" and a "Server:" section containing an error: "ERROR: Cannot connect to the Docker daemon at unix:///var/run/docker.sock. Is the docker daemon running?". Below this, it shows the command "sudo systemctl start docker" and then "sudo systemctl status docker". The status output for "docker.service" shows it is "loaded" but "disabled", and "active (running)" since Tue 2023-09-05 05:32:00 CST. It lists various details like Main PID (12116), Tasks (9), Memory (29.0M), CPU (610ms), and CGroup. At the bottom, there are three log lines from systemd and dockerd showing the start time of the Docker Application Container Engine and the dockerd process.

```
Terminal - g4br13l@G4B1:~
File Edit View Terminal Tabs Help
Debug Mode: false

Server:
ERROR: Cannot connect to the Docker daemon at unix:///var/run/docker.sock. Is the
e docker daemon running?
errors pretty printing info
[g4br13l@UwU ~]$ sudo systemctl start docker
[g4br13l@UwU ~]$ sudo systemctl status docker
• docker.service - Docker Application Container Engine
  Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; preset: >
  Active: active (running) since Tue 2023-09-05 05:32:00 CST; 23s ago
TriggeredBy: • docker.socket
  Docs: https://docs.docker.com
  Main PID: 12116 (dockerd)
  Tasks: 9
  Memory: 29.0M
  CPU: 610ms
  CGroup: /system.slice/docker.service
└─12116 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/con>

sep 05 05:31:56 G4B1 systemd[1]: Starting Docker Application Container Engine...
sep 05 05:31:56 G4B1 dockerd[12116]: time="2023-09-05T05:31:56.712722570-06:00">
sep 05 05:31:57 G4B1 dockerd[12116]: time="2023-09-05T05:31:57.836501333-06:00">
sep 05 05:31:59 G4B1 dockerd[12116]: time="2023-09-05T05:31:59.120962126-06:00">
```

Después de iniciar el servicio comprobé con el comando **sudo docker run hello-world**:



```
Terminal - g4br13l@G4B1:~
File Edit View Terminal Tabs Help

[g4br13l@UwU ~]$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally

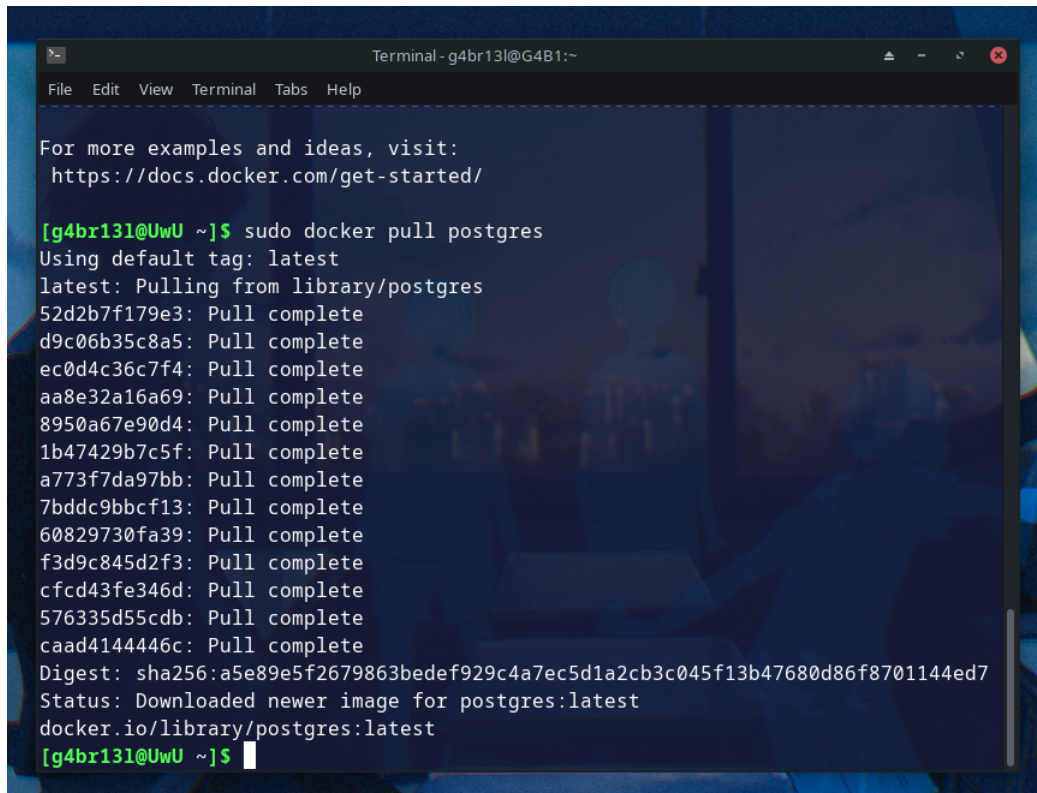
latest: Pulling from library/hello-world
719385e32844: Pull complete
Digest: sha256:dcba6daec718f547568c562956fa47e1b03673dd010fe6ee58ca806767031d1c
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
```

Para postgres descargué la imagen con el comando **sudo docker pull postgres**:

A terminal window titled "Terminal - g4br13l@G4B1:~" with a menu bar (File, Edit, View, Terminal, Tabs, Help). The terminal shows the command "sudo docker pull postgres" being executed. The output indicates that the latest tag is used and the image is pulled from the library/postgres repository. It lists 14 layers being pulled, each marked as "complete". The digest is shown as sha256:a5e89e5f2679863bedef929c4a7ec5d1a2cb3c045f13b47680d86f8701144ed7. The status is "Downloaded newer image for postgres:latest" and the source is "docker.io/library/postgres:latest". The prompt returns to the user.

```
>-  
File Edit View Terminal Tabs Help  
  
For more examples and ideas, visit:  
https://docs.docker.com/get-started/  
  
[g4br13l@UwU ~]$ sudo docker pull postgres  
Using default tag: latest  
latest: Pulling from library/postgres  
52d2b7f179e3: Pull complete  
d9c06b35c8a5: Pull complete  
ec0d4c36c7f4: Pull complete  
aa8e32a16a69: Pull complete  
8950a67e90d4: Pull complete  
1b47429b7c5f: Pull complete  
a773f7da97bb: Pull complete  
7bdc9bbcf13: Pull complete  
60829730fa39: Pull complete  
f3d9c845d2f3: Pull complete  
cfcd43fe346d: Pull complete  
576335d55cdb: Pull complete  
caad4144446c: Pull complete  
Digest: sha256:a5e89e5f2679863bedef929c4a7ec5d1a2cb3c045f13b47680d86f8701144ed7  
Status: Downloaded newer image for postgres:latest  
docker.io/library/postgres:latest  
[g4br13l@UwU ~]$
```

Una vez descargada la imagen creamos el contenedor con el comando
**sudo docker run -d --name postgres -e POSTGRES_PASSWORD=mysecretpasswo
-p 5432:5432 postgres:**

```
docker.io/library/postgres:latest
[g4br131@UwU ~]$ sudo docker run -d --name postgres -e POSTGRES_PASSWORD=
-p 5432:5432 postgres
50f02a723af711d87ab415954465fde48ec25791262d473ca179b86bd0b53ee4
[g4br131@UwU ~]$
```


Después verifiqué que funcionara, probando los comandos **sudo docker ps -a** para ver el contenedor y **sudo docker run -it --link postgres:postgres postgres psql -h postgres -U postgres** para usar la consola psql:

```
terminal - g4br131@G4B1:~
File Edit View Terminal Tabs Help
bash: sudo: command not found
[g4br131@UwU ~]$ sudo docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS      PORTS                               NAMES
50f02a723af7   postgres  "docker-entrypoint.s..." About a minute Up         0.0.0.0:5432->5432/tcp, :::5432->5432/tcp   postgres
d052254aaf3f   hello-world "/hello"                6 minutes ago   Exited(0)                                inspiring_mcclintock
[g4br131@UwU ~]$ sudo docker run -it --link postgres:postgres postgres psql -h postgres -U postgres
Password for user postgres:
psql (15.4 (Debian 15.4-1.pgdg120+1))
Type "help" for help.

postgres=# help
You are using psql, the command-line interface to PostgreSQL.
Type: \copyright for distribution terms
       \h for help with SQL commands
       \? for help with psql commands
       \g or terminate with semicolon to execute query
       \q to quit
postgres=# \q
[g4br131@UwU ~]$
```


Para instalar dbeaver ejecuté el comando **sudo pacman -S dbeaver**:

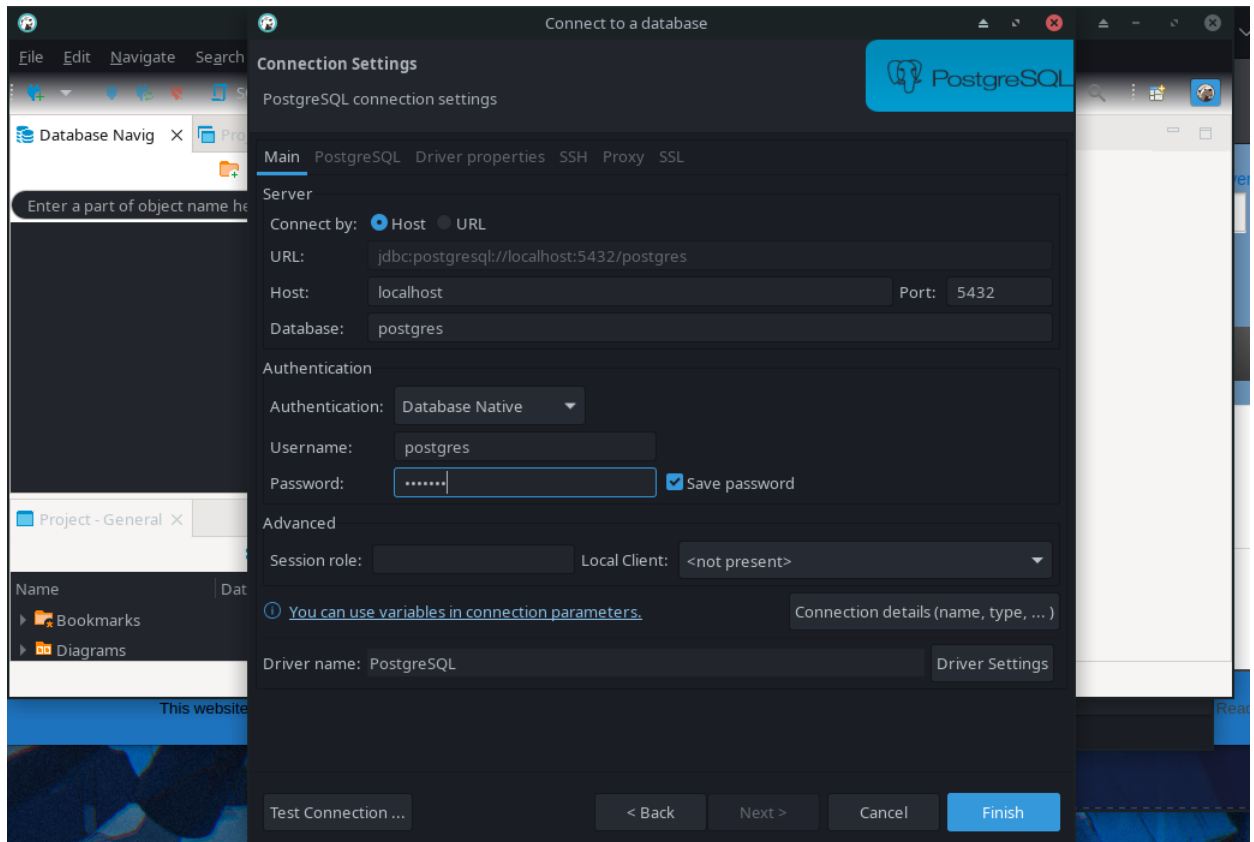
```
File Edit View Terminal Tabs Help
[g4br131@UwU ~]$ sudo pacman -S dbeaver
resolving dependencies...
looking for conflicting packages...

Supongamos que por el anterior comando nos da que el CONTAINER ID es ale321c26d33, entonces para
Packages (1): dbeaver-23.1.4-1

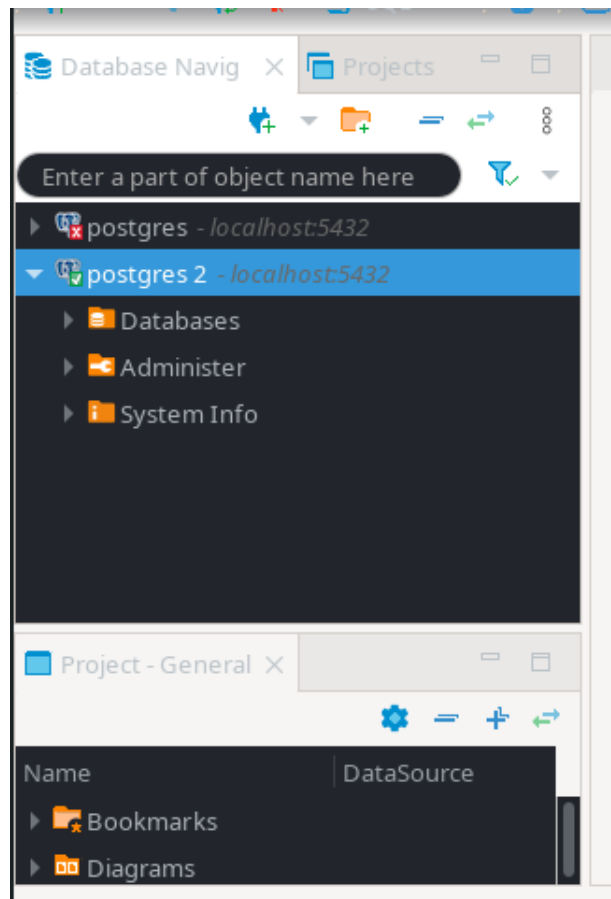
Total Download Size: 77.07 MiB
Total Installed Size: 88.04 MiB, utilizamos el comando siguiente.

:: Proceed with installation? [Y/n] y
:: Retrieving packages...
dbeaver-23.1.4-1... 77.1 MiB 4.71 MiB/s 00:16 [#####] 100%
(1/1) checking keys in keyring [#####] 100%
(1/1) checking package integrity [#####] 100%
(1/1) loading package files [#####] 100%
(1/1) checking for file conflicts [#####] 100%
(1/1) checking available disk space [#####] 100%
:: Processing package changes...
(1/1) installing dbeaver [#####] 100%
Optional dependencies for dbeaver
dbeaver-plugin-office: export data in Microsoft Office Excel format
dbeaver-plugin-svg-format: save diagrams in SVG format
:: Running post-transaction hooks...
(1/4) Arming ConditionNeedsUpdate...
```

Al iniciar Dbeaver y seleccionar el sistema PostgreSQL escribí mi contraseña:



Finalmente verificamos que nos haya conectado al aparecer una palomita.
(la primera me dio error ya que escribí mal la contraseña):



- **problemas a los que me enfrenté:** los único problemas fueron cuando no corría **hello-world** ya que no había iniciado el servicio, y al escribir mal la contraseña en Dbeaver