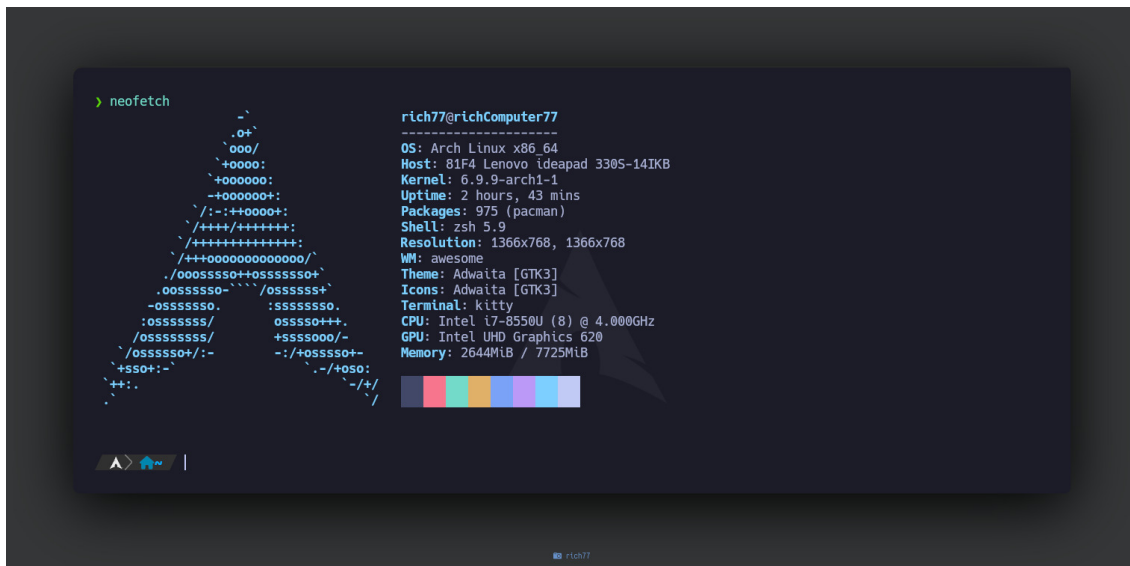


Reporte Instalación de Docker y del SMBD, PostgreSQL

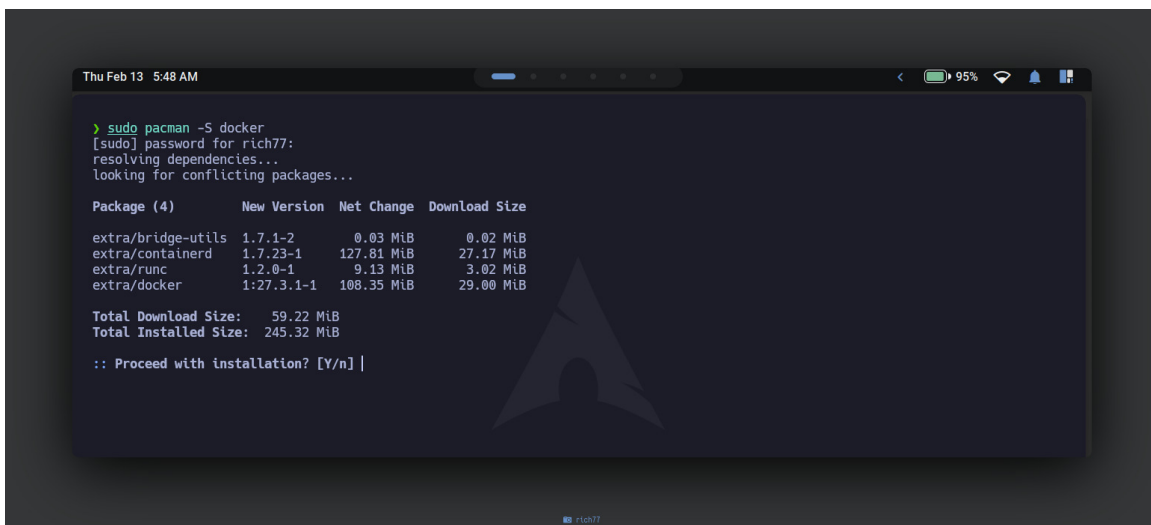
Sistema operativo, distribución y versión

- S.O: Linux Distribución: Arch Linux, Kernel: 6.9.9-arch1-1.



Instalación de Docker

- Se instaló la versión 1:27.3.1-1, utilizando los repositorios oficiales de arch linux con pacman.



```
Thu Feb 13 6:07 AM

looking for conflicting packages...

Package (i)  New Version  Net Change  Download Size
-----
extra/docker 1:27.5.1-1  119.48 MiB  29.48 MiB
Total Download Size: 29.48 MiB
Total Installed Size: 119.48 MiB

:: Proceed with installation? [Y/n] Y
:: Retrieving packages...
docker-1:27.5.1-1.glibc.27.5.1-1  29.5 MiB  9.18 MiB/s 49-83 [#####] 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 docker
Optional dependencies for docker
  diffutils: diffutils backend support
  pigz: initial gzip compression support
  docker-buildx: extended build capabilities
:: Running post-transaction hooks...
(1/4) Creating system user accounts...
Creating group 'docker' with GID 985.
(2/4) Reloading system manager configuration...
(3/4) Reloading device manager configuration...
(4/4) Arming ConditionNeedsUpdate...

A> dock --version
```

- Verificamos instalación:

```
> docker --version
Docker version 27.5.1, build 9f9e405801

A>
```

- En arch linux para poder utilizar los servicios de Docker, hay que inicializar el servicio. Y comprobamos con un ejemplo de contenedor en Docker.

```
Thu Feb 13 6:11 AM

--no-healthcheck      Disable any container-specified HEALTHCHECK
--oom-kill-disable     Disable OOM Killer
--oom-score-adjust int  Tune host's OOM preferences (-1000 to 1000)
> sudo systemctl enable --now docker
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service - /usr/lib/systemd/system/docker.service'.
> docker --version
Docker version 27.5.1, build 9f9e405801
> docker run hello-world
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock": dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.
> sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6598344b1a5: Pull complete
Digest: sha256:e6b59e5d363a560b84e218a258767d447e88f87a0e90798363fa44a0464a1e8
Status: Downloaded newer image for hello-world:latest

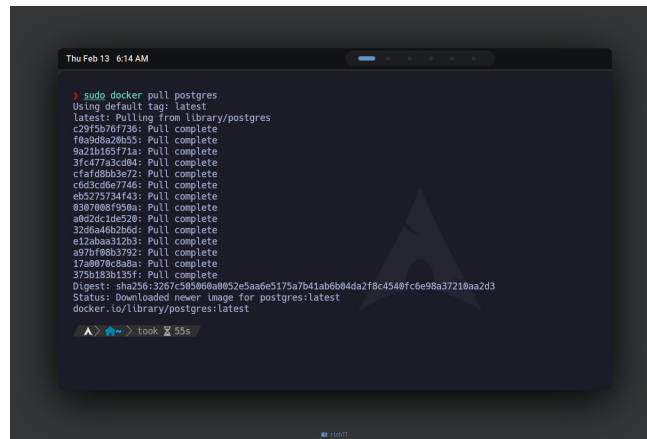
Hello from Docker!
This message shows that your installation appears to be working correctly.

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:
```

Instalación del SMBD PostgreSQL en contenedor de docker

- Instalamos la imagen de posrgreSQL en Docker:



```

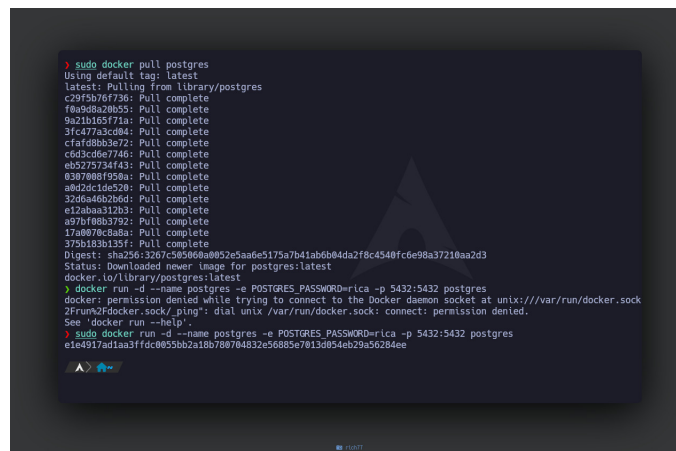
Thu Feb 13 6:14 AM

> sudo docker pull postgres
Using default tag: latest
latest: Pulling from library/postgres
c29f5b76f736: Pull complete
f0a9d8a20b55: Pull complete
9a21b165f71a: Pull complete
3fc477a3cd04: Pull complete
cfafdbb3e72: Pull complete
c6d3cd6e7746: Pull complete
eb5275734f43: Pull complete
0307000f950a: Pull complete
a0d2dc1de520: Pull complete
32d6a46b2b6d: Pull complete
e12abaa312b3: Pull complete
a97bf08b3792: Pull complete
17a0070c8a8a: Pull complete
375b183b135f: Pull complete
Digest: sha256:3267c505060a0052e5aa6e5175a7b41ab6b04da2f8c4540fc6e98a37218aa2d3
Status: Downloaded newer image for postgres:latest
docker.io/library/postgres:latest

^> ^> took 55s

```

- Configuramos contraseña y puerto para el servicio. Y prendemos el contenedor de postgresQL.



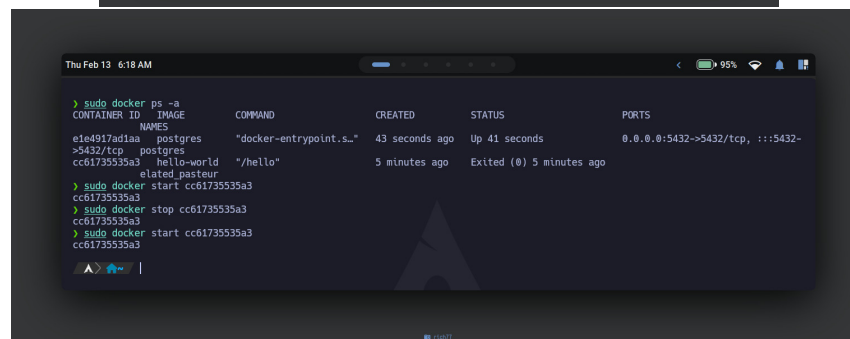
```

> sudo docker pull postgres
Using default tag: latest
latest: Pulling from library/postgres
c29f5b76f736: Pull complete
f0a9d8a20b55: Pull complete
9a21b165f71a: Pull complete
3fc477a3cd04: Pull complete
cfafdbb3e72: Pull complete
c6d3cd6e7746: Pull complete
eb5275734f43: Pull complete
0307000f950a: Pull complete
a0d2dc1de520: Pull complete
32d6a46b2b6d: Pull complete
e12abaa312b3: Pull complete
a97bf08b3792: Pull complete
17a0070c8a8a: Pull complete
375b183b135f: Pull complete
Digest: sha256:3267c505060a0052e5aa6e5175a7b41ab6b04da2f8c4540fc6e98a37218aa2d3
Status: Downloaded newer image for postgres:latest
docker.io/library/postgres:latest

> docker run -d --name postgres -e POSTGRES_PASSWORD=rica -p 5432:5432 postgres
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.

> sudo docker run -d --name postgres -e POSTGRES_PASSWORD=rica -p 5432:5432 postgres
e1e4917ad1aa3f1dc0055bb2a18b788784832e56885e7813d054eb29a56284ee

```



```

Thu Feb 13 6:18 AM

> sudo docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS
e1e4917ad1aa   postgres  "docker-entrypoint.s..."  43 seconds ago Up 41 seconds  0.0.0.0:5432->5432/tcp, :::5432-
>5432/tcp      postgres  "hello-world"            5 minutes ago Exited (0) 5 minutes ago
cc61735535a3   elated_pos
cc61735535a3

> sudo docker start cc61735535a3
cc61735535a3

> sudo docker stop cc61735535a3
cc61735535a3

> sudo docker start cc61735535a3
cc61735535a3

```

- Probamos PostgreSQL en su terminal para ver que esté bien instalado.

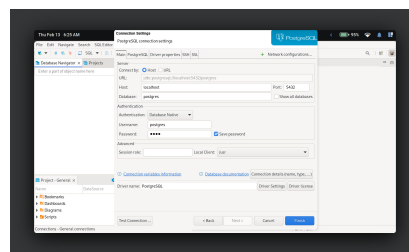
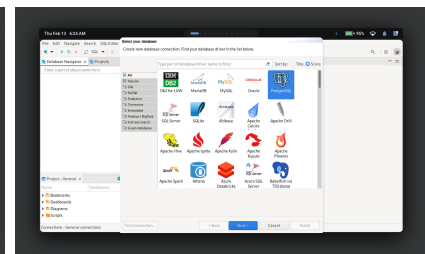
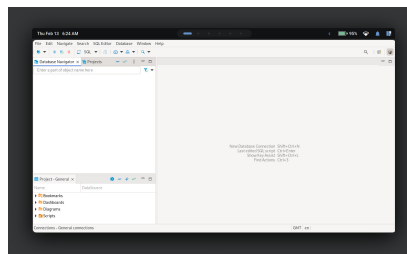
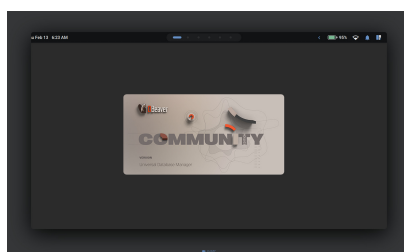
```
> docker --version
Docker version 27.5.1, build 9f9e405801
> docker run hello-world
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied.
> sudo docker run -it --link postgres:postgres postgres psql -h postgres -U postgres
Password for user postgres:
psql (17.2 (Debian 17.2-1.pgdg120+1))
Type "help" for help.

postgres=# show databases;
ERROR: unrecognized configuration parameter "databases"
postgres=# show databases
postgres=# SELECT version();
ERROR: syntax error at or near "SELECT"
LINE 2: SELECT version();
          ^
postgres=# \l
                                List of databases
  Name      | Owner   | Encoding | Locale Provider | Collate | Ctype   | Locale | ICU Rules | Access privileges
-----+-----+-----+-----+-----+-----+-----+-----+-----
postgres    | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |         |           | =c/postgres
template0   | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |         |           | postgres=CTc/postgres
template1   | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |         |           | postgres=CTc/postgres
(3 rows)

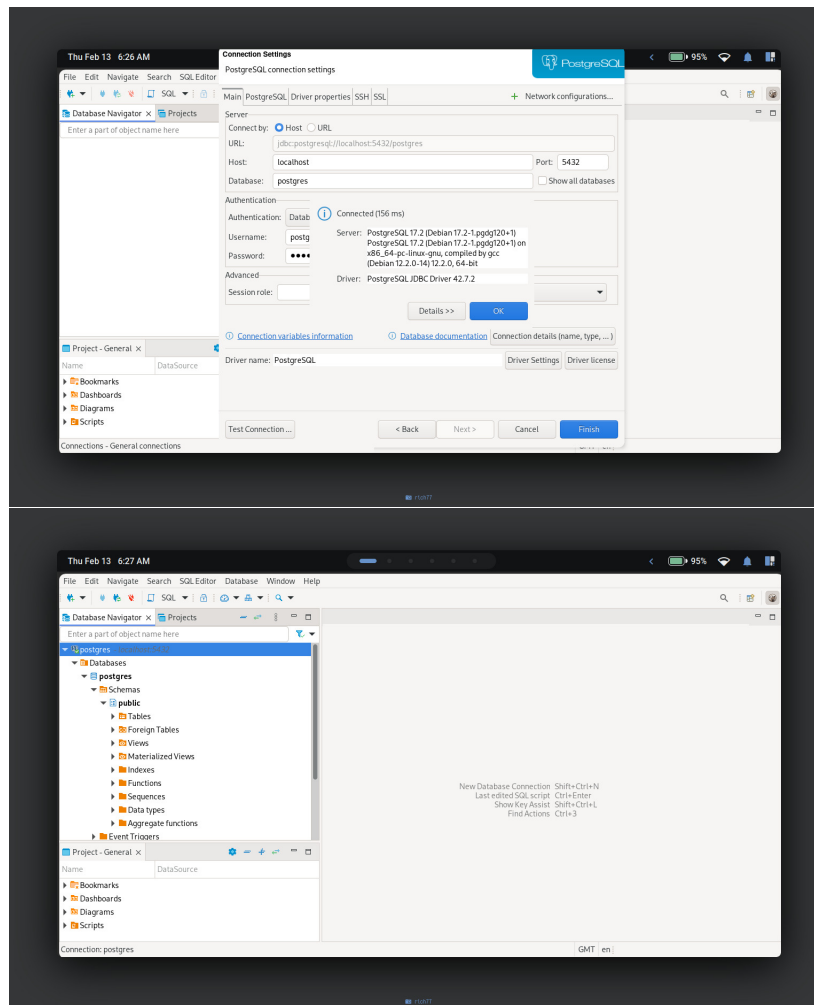
postgres=#
```

Conexión a DBeaver

- Dado que en mi caso ya lo tenía instalado, no quería destartalo y volverlo a instalar, pero muestro paso a paso como configuré la conexión a mi base de datos.
- primeramente seleccionamos el tipo de conexión PostgreSQL para que nos instale todos los drivers necesarios.



- Probamos conexión:



Tiempo requerido Comentarios y problemas de la instalación

En realidad no tuve ninguna complicación fuerte pues puede instalar todo alrededor de unos 15 minutos. Solo tuve unos pequeños problemas al actualizar mis paquetes de mis repositorios. Y algunas dependencias de docker las tuve que buscar manualmente. De ahí en fuera toda la instalación fue rápida y sin problemas.