

Bases de datos 2023-1

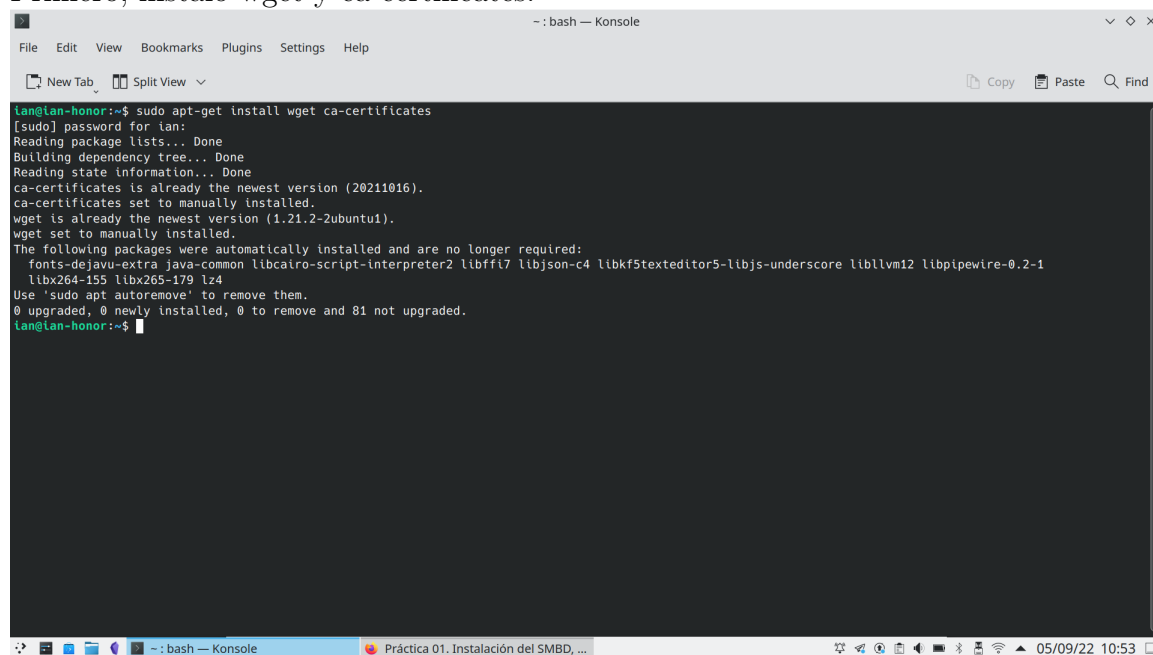
Práctica 1: Bitácora

6 de septiembre de 2022

Reporte de instalación:

1. *Sistema operativo y versión:* GNU
linux 5.15.47-generic
2. *Distribución:* Ubuntu 22.04
3. *Versión de la instalación:* psql (PostgreSQL) 14.5
4. *Tiempo requerido:* 20min
5. *Paso a Paso:*

Primero, instalo wget y ca-certificates:



```
lan@lan-honor:~$ sudo apt-get install wget ca-certificates
[sudo] password for lan:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20211016).
ca-certificates set to manually installed.
wget is already the newest version (1.21.2-2ubuntu1).
wget set to manually installed.
The following packages were automatically installed and are no longer required:
 fonts-dejavu-extra java-common libcairo-script-interpret2 libffi7 libjson-c4 libkf5texteditor5-libjs-underscore libllvm12 libpipewire-0.2-1
 libx264-155 libx265-179 lz4
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 81 not upgraded.
lan@lan-honor:~$
```

Después, agrego la GPG key de PostgreSQL:

```
lan@lan-honor:~$ sudo apt-get install wget ca-certificates
[sudo] password for ian:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20211016).
ca-certificates set to manually installed.
wget is already the newest version (1.21.2-2ubuntu1).
wget set to manually installed.
The following packages were automatically installed and are no longer required:
 fonts-dejavu-extra java-common libcairo-script-interpreter2 libffi7 libjson-c4 libkf5texteditor5-libjs-underscore libllvm12 libpipewire-0.2-1
 libx264-155 libx265-179 lz4
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 81 not upgraded.
lan@lan-honor:~$ wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
lan@lan-honor:~$
```

Posteriormente, intento agregar la GPG key de PgAdmin, momento en el que me doy cuenta que no tengo instalado curl:

```
lan@lan-honor:~$ sudo apt-get install wget ca-certificates
[sudo] password for ian:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20211016).
ca-certificates set to manually installed.
wget is already the newest version (1.21.2-2ubuntu1).
wget set to manually installed.
The following packages were automatically installed and are no longer required:
 fonts-dejavu-extra java-common libcairo-script-interpreter2 libffi7 libjson-c4 libkf5texteditor5-libjs-underscore libllvm12 libpipewire-0.2-1
 libx264-155 libx265-179 lz4
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 81 not upgraded.
lan@lan-honor:~$ wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
lan@lan-honor:~$ curl https://www.pgadmin.org/static/packages_pgadmin_org.pub | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
Command 'curl' not found, but can be installed with:
sudo snap install curl # version 7.84.0, or
sudo apt install curl # version 7.81.0-1ubuntu1.4
See 'snap info curl' for additional versions.
gpg: no valid OpenPGP data found.
lan@lan-honor:~$
```

Por lo que procedo a instalar curl:

```
lan@lan-honor:~$ sudo apt install curl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  fonts-dejavu-extra java-common libcairo-script-interpreter2 libffi7 libjson-c4 libkf5texteditor5-libs-underscore libllvm12 libpipewire-0.2-1
  libx264-155 libx265-179 lz4
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libcurl4
The following NEW packages will be installed:
  curl
The following packages will be upgraded:
  libcurl4
1 upgraded, 1 newly installed, 0 to remove and 80 not upgraded.
Need to get 484 kB of archives.
After this operation, 453 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://mx.archive.ubuntu.com/ubuntu/jammy-updates/main amd64 libcurl4 amd64 7.81.0-1ubuntu1.4 [290 kB]
Get:2 http://mx.archive.ubuntu.com/ubuntu/jammy-updates/main amd64 curl amd64 7.81.0-1ubuntu1.4 [194 kB]
Fetched 484 kB in 2s (230 kB/s)
(Reading database ... 193267 files and directories currently installed.)
Preparing to unpack .../libcurl4_7.81.0-1ubuntu1.4_amd64.deb ...
Unpacking libcurl4:amd64 (7.81.0-1ubuntu1.4) over (7.81.0-1ubuntu1.3) ...
Selecting previously unselected package curl.
Preparing to unpack .../curl_7.81.0-1ubuntu1.4_amd64.deb ...
Unpacking curl (7.81.0-1ubuntu1.4) ...
Setting up libcurl4:amd64 (7.81.0-1ubuntu1.4) ...
Setting up curl (7.81.0-1ubuntu1.4) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
lan@lan-honor:~$
```

Después de lo cual, agrego la GPG key de PgAdmin con normalidad, y procedo a agregar los repositorios oficiales de PostgreSQL y PgAdmin:

```
lan@lan-honor:~$ sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt/ `lsb_release -cs`-pgdg main" >> /etc/apt/sources.list.d/pgdg.list'
lan@lan-honor:~$ sudo sh -c 'echo "deb https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4 main" >> /etc/apt/sources.list.d/pgadmin4.list'
lan@lan-honor:~$
```

Y actualizo la lista de paquetes:

```
lan@lan-honor:~$ sudo apt update
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:2 http://mx.archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://apt.postgresql.org/pub/repos/apt jammy-pgdg InRelease
Get:4 http://mx.archive.ubuntu.com/ubuntu jammy-updates InRelease [114 kB]
Get:5 https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/jammy pgadmin4 InRelease [4 217 B]
Get:6 http://mx.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Fetched 328 kB in 2s (208 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
61 packages can be upgraded. Run 'apt list --upgradable' to see them.
W: http://apt.postgresql.org/pub/repos/apt/dists/jammy-pgdg/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
N: Skipping acquire of configured file 'main/binary-i386/Packages' as repository 'http://apt.postgresql.org/pub/repos/apt jammy-pgdg InRelease' doesn't support architecture 'i386'
lan@lan-honor:~$
```

Con lo cual, finalmente puedo instalar los paquetes:

```
lan@lan-honor:~$ sudo apt install postgresql postgresql-contrib pgadmin4
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  fonts-dejavu-extra java-common libcairo-script-interpreter2 libffi7 libjson-c4 libkf5texteditor5-libjs-underscore libllvm12 libpipewire-0.2-1
  libx264-155 libx265-179 linux-headers-generic-hwe-20.04 linux-image-generic-hwe-20.04 lz4
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapache2-mod-wsgi-py3 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libcommon-sense-perl
  libjson-perl libjson-xs-perl libllvm14 liblua5.3-0 libpq5 libtypes-serialiser-perl pgadmin4-desktop pgadmin4-server pgadmin4-web pgdg-keyring
  postgresql-14 postgresql-client-14 postgresql-client-common postgresql-common sysstat
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser postgresql-doc postgresql-doc-14 isag
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapache2-mod-wsgi-py3 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libcommon-sense-perl
  libjson-perl libjson-xs-perl libllvm14 liblua5.3-0 libpq5 libtypes-serialiser-perl pgadmin4 pgadmin4-desktop pgadmin4-server pgadmin4-web pgdg-keyring
  postgresql postgresql-14 postgresql-client-14 postgresql-client-common postgresql-common postgresql-contrib sysstat
0 upgraded, 28 newly installed, 0 to remove and 61 not upgraded.
Need to get 242 MB of archives.
After this operation, 181 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 libapr1 amd64 1.7.0-8build1 [107 kB]
Get:2 http://apt.postgresql.org/pub/repos/apt jammy-pgdg/main amd64 pgdg-keyring all 2018.2 [10.7 kB]
Get:3 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1 amd64 1.6.1-Subuntu4 [92.4 kB]
Get:4 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.1-Subuntu4 [11.3 kB]
Get:5 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1-ldap amd64 1.6.1-Subuntu4 [9 162 B]
Get:6 http://mx.archive.ubuntu.com/ubuntu jammy/main amd64 liblua5.3-0 amd64 5.3.6-1build1 [140 kB]
Get:7 http://mx.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-bin amd64 2.4.52-1ubuntu4.1 [1 347 kB]
Get:8 https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/jammy pgadmin4/main amd64 libpq5 amd64 14.5-1.pgdg22.04+1 [172 kB]
Get:9 http://apt.postgresql.org/pub/repos/apt jammy-pgdg/main amd64 postgresql-client-common all 242.pgdg22.04+1 [92.2 kB]
Get:10 http://mx.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-data all 2.4.52-1ubuntu4.1 [165 kB]
Get:11 http://mx.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-utils amd64 2.4.52-1ubuntu4.1 [89.1 kB]
Get:12 http://mx.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2 amd64 2.4.52-1ubuntu4.1 [97.8 kB]
```

Verifico el estado de la instalación:

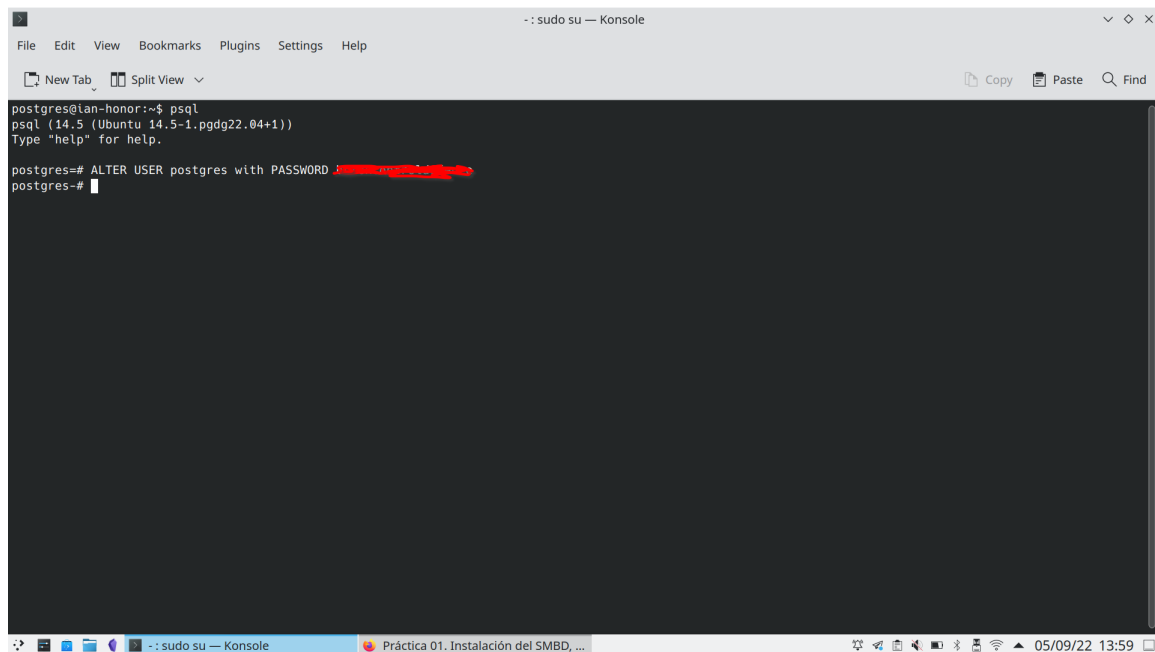
```
ian@ian-honor:~$ service postgresql status
● postgresql.service - PostgreSQL RDBMS
   Loaded: loaded (/lib/systemd/system/postgresql.service; enabled; vendor preset: enabled)
   Active: active (exited) since Mon 2022-09-05 13:51:34 CDT; 5min ago
     Main PID: 32838 (code=exited, status=0/SUCCESS)
        CPU: 2ms

sep 05 13:51:34 ian-honor systemd[1]: Starting PostgreSQL RDBMS...
sep 05 13:51:34 ian-honor systemd[1]: Finished PostgreSQL RDBMS.
ian@ian-honor:~$
```

Habiendo hecho esto, establezco una conexión con la base de datos:

```
ian@ian-honor:~$ sudo su - postgres
[sudo] password for ian:
postgres@ian-honor:~$
```

Y para finalizar, abro el prompt y cambio la contraseña del superusuario:

A screenshot of a terminal window titled "sudo su — Konsole". The terminal shows a user named "postgres" at a host named "ian-honor" with a tilde (~) as the home directory. The user has run the command "psql", which has opened a PostgreSQL shell. The shell prompt is "psql (14.5 (Ubuntu 14.5-1.pgdg22.04+1))". The user has entered the command "ALTER USER postgres with PASSWORD '[REDACTED]'", where the password is obscured by red dots. The terminal window has a menu bar with "File", "Edit", "View", "Bookmarks", "Plugins", "Settings", and "Help". There are also icons for "New Tab", "Split View", "Copy", "Paste", and "Find". The bottom of the window shows a taskbar with icons for a terminal, a file manager, and a web browser, along with the system clock showing "05/09/22 13:59".

```
postgres@ian-honor:~$ psql
psql (14.5 (Ubuntu 14.5-1.pgdg22.04+1))
Type "help" for help.

postgres=# ALTER USER postgres with PASSWORD '[REDACTED]'
postgres=#
```

6. Comentarios y problemas:

Afortunadamente, ya que uso ubuntu, pude seguir todos los pasos del pdf de la práctica, lo cual no fue complicado.

El único problema con el que me enfrente fue el que no tenía instalado curl, pero instalarlo fue bastante simple.