# Creacion de una instancia EC2 en el Free Tier.



# Conectandose a la instancia con SSH.



# Login
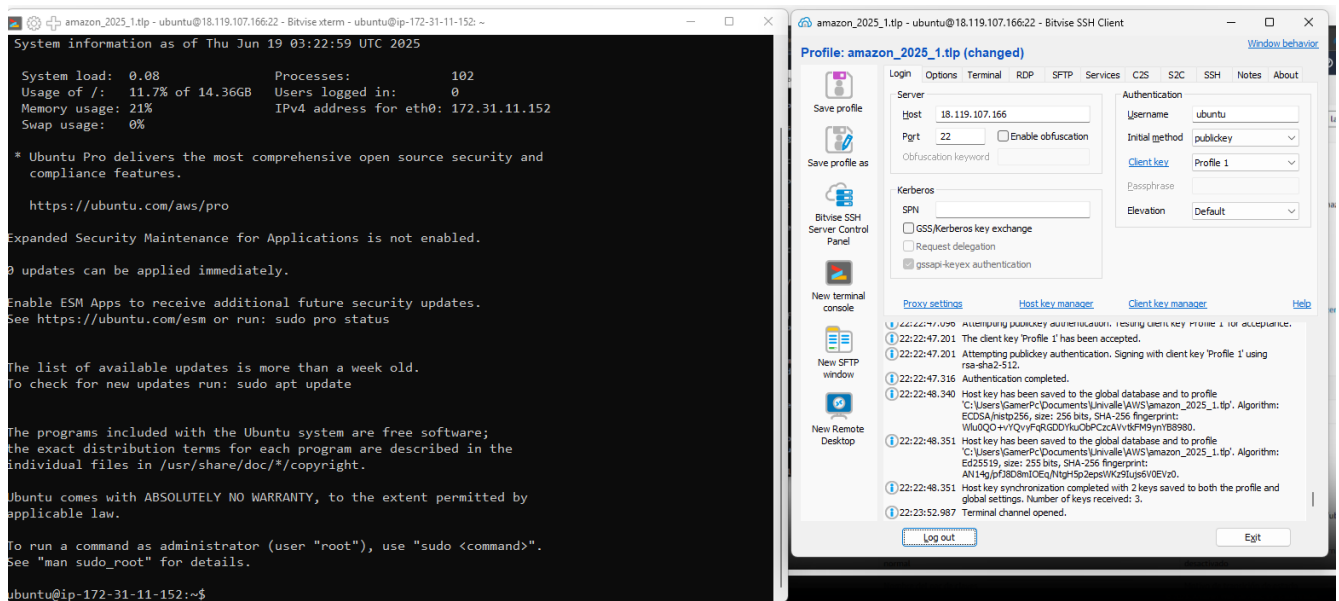
## Instalar nginx



```
ubuntu@ip-172-31-11-152:~$ sudo apt  install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjbig0 libjpeg-turbo8
  libjpeg8 libnginx-mod-http-geoip2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5 libwebp7 libxpm4
  nginx-common nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjbig0 libjpeg-turbo8
  libjpeg8 libnginx-mod-http-geoip2 libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter
  libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5 libwebp7 libxpm4 nginx
  nginx-common nginx-core
0 upgraded, 20 newly installed, 0 to remove and 55 not upgraded.
Need to get 2693 kB of archives.
After this operation, 8346 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 fonts-dejavu-core all 2.37-2bu
ild1 [1041 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 fontconfig-config all 2.13.1-4
.2ubuntu5 [29.1 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libdeflate0 amd64 1.10-2 [70.9
 kB]
Get:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libfontconfig1 amd64 2.13.1-4.
2ubuntu5 [131 kB]
```

## Instalando Java y Postgresql



```
ubuntu@ip-172-31-11-152:~$ java -version
openjdk version "17.0.15" 2025-04-15
OpenJDK Runtime Environment (build 17.0.15+6-Ubuntu-0ubuntu122.04)
OpenJDK 64-Bit Server VM (build 17.0.15+6-Ubuntu-0ubuntu122.04, mixed mode, sharing)
ubuntu@ip-172-31-11-152:~$
```



```
ubuntu@ip-172-31-11-152:~$ psql  -V
psql (PostgreSQL) 14.18 (Ubuntu 14.18-0ubuntu0.22.04.1)
ubuntu@ip-172-31-11-152:~$
```

```
ubuntu@ip-172-31-11-152:~$ ss -pnltue|grep postgresql
tcp   LISTEN 0      244            127.0.0.1:5432       0.0.0.0:*    uid:115 ino:19684 sk:8 cgroup:/
system.slice/system-postgresql.slice/postgresql@14-main.service <->
ubuntu@ip-172-31-11-152:~$ sudo su postgres
postgres@ip-172-31-11-152:/home/ubuntu$ psql
could not change directory to "/home/ubuntu": Permission denied
psql (14.18 (Ubuntu 14.18-0ubuntu0.22.04.1))
Type "help" for help.

postgres=# CREATE USER devdb WITH ENCRYPTED PASSWORD 'a1b2c3d4';
CREATE ROLE
postgres=# ALTER USER postgres PASSWORD 'a1b2c3d4';
ALTER ROLE
postgres=# \q
postgres@ip-172-31-11-152:/home/ubuntu$ ss -pnltue|grep nginx
tcp   LISTEN 0      511              0.0.0.0:80       0.0.0.0:*    ino:11674 sk:6 cgroup:/system.s
lice/nginx.service <->

tcp   LISTEN 0      511                [::]:80         [::]:*    ino:11675 sk:a cgroup:/system.s
lice/nginx.service v6only:1 <->

postgres@ip-172-31-11-152:/home/ubuntu$
```
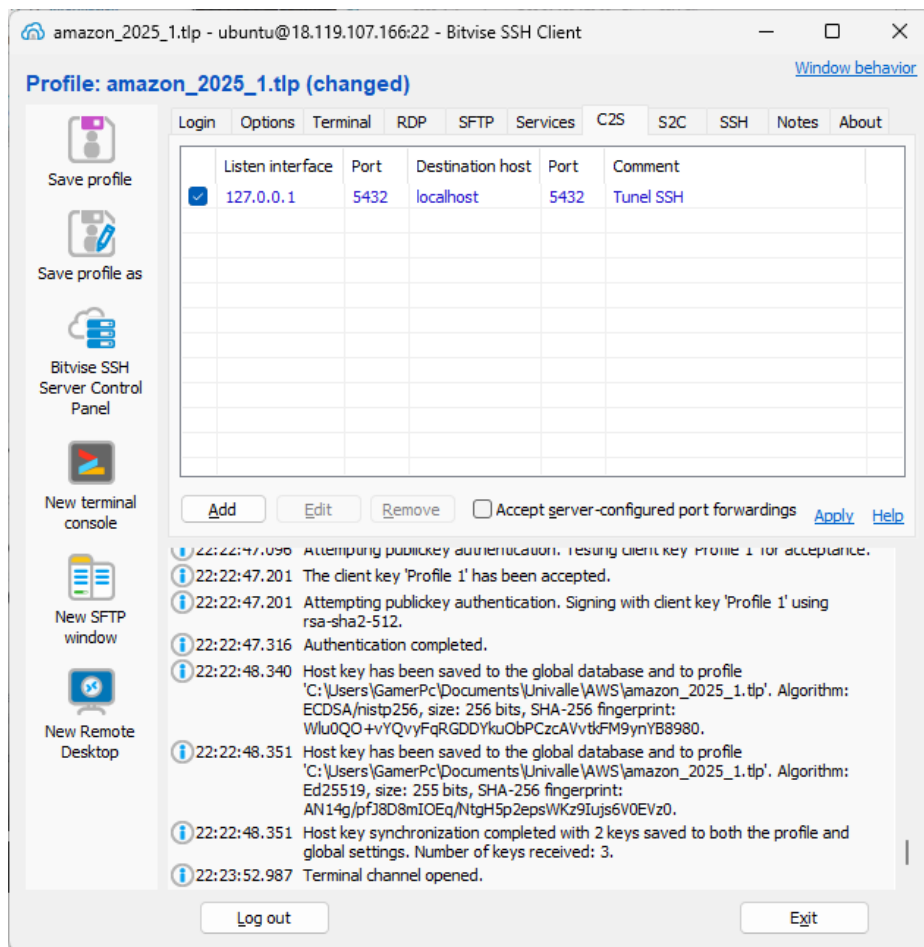
Apertura del puerto web (80) en la consola de EC2



Creacion de un tunel C2S para pgadmin

Configurando pgadmin con postgresql
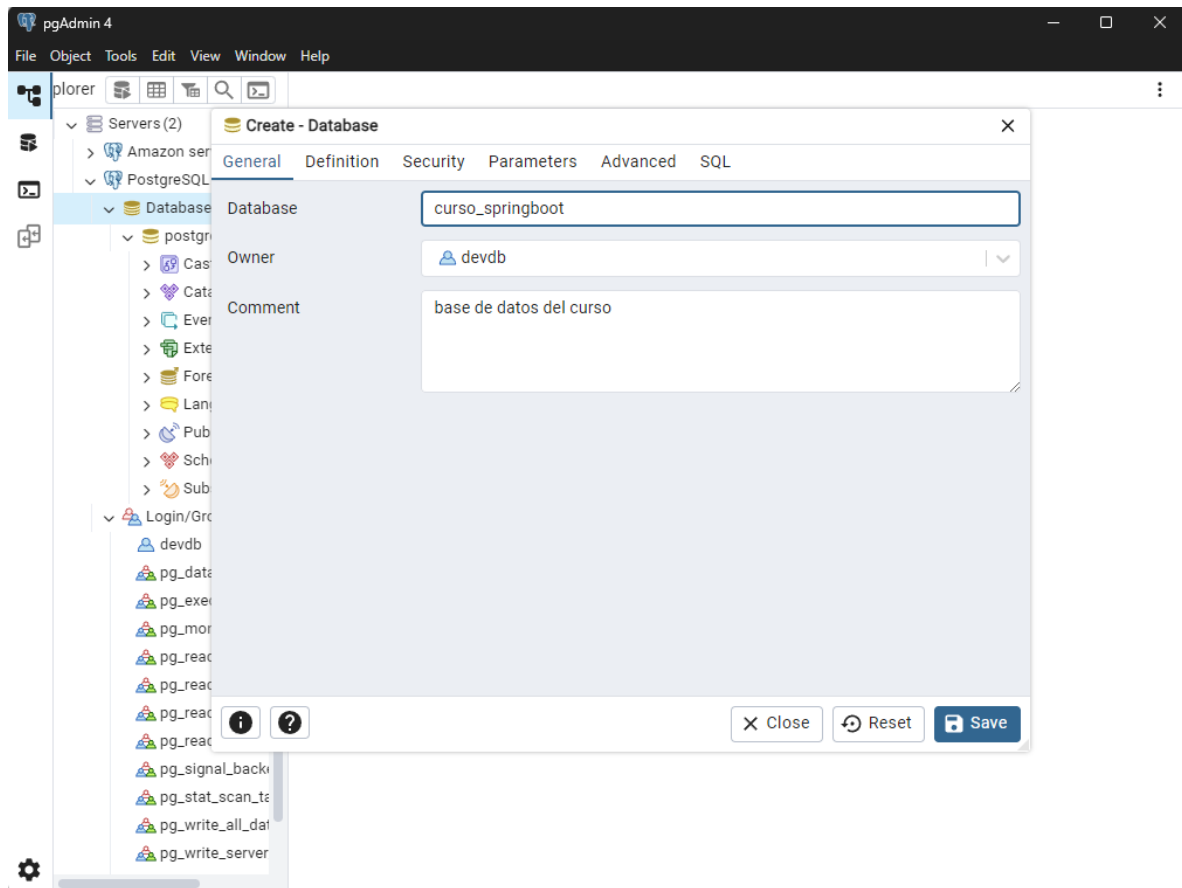
Creando un par de llaves RSA con passphrase

```
Run 'do-release-upgrade' to upgrade to it.


Last login: Thu Jun 19 04:05:25 2025 from 186.98.47.20
ubuntu@ip-172-31-11-152:~$ cd .ssh
ubuntu@ip-172-31-11-152:~/.ssh$ ls -la
total 12
drwx------ 2 ubuntu ubuntu 4096 Jun 19 03:12 .
drwxr-x--- 4 ubuntu ubuntu 4096 Jun 19 03:46 ..
-rw------- 1 ubuntu ubuntu  401 Jun 19 03:12 authorized_keys
ubuntu@ip-172-31-11-152:~/.ssh$ ssh-keygen -t  RSA -m PEM -b 2048
Generating public/private RSA key pair.
Enter file in which to save the key (/home/ubuntu/.ssh/id_rsa): id_rsa_aws_2025_1_pass
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in id_rsa_aws_2025_1_pass
Your public key has been saved in id_rsa_aws_2025_1_pass.pub
The key fingerprint is:
SHA256:GkyYefBT7moXa8DHI32uRZ/HryUSigxo5Q6whGB5k/w ubuntu@ip-172-31-11-152
The key's randomart image is:
+---[RSA 2048]----+
|..o o   .        |
|oo = * o         |
|. + * * .        |
| . o E =         |
|  . + O S o .    |
|   . o X O o +   |
|    = * + + + .| 
|    . o o   o + |
|      .     ...|
+----[SHA256]-----+
ubuntu@ip-172-31-11-152:~/.ssh$ ls
authorized_keys  id_rsa_aws_2025_1_pass  id_rsa_aws_2025_1_pass.pub
ubuntu@ip-172-31-11-152:~/.ssh$ cat id_rsa_aws_2025_1_pass.pub >> authorized_keys
ubuntu@ip-172-31-11-152:~/.ssh$
```

amazon_2025_1.tlp - ubuntu@18.119.107.166:22 - Bitvise SSH Client

Window behavior

**Profile: amazon_2025_1.tlp (changed)**

Login | Options | Terminal | RDP | SFTP | Services | C2S | S2C | SSH | Notes | About

Save profile

Server
Host 18.119.107.166

Authentication
Username ubuntu

Bitvise Client Key Management | Cryptographic provider: Windows CNG (x86) with additions

**Client Key Manager**

You have the following SSH user authentication keys:

| Location | Algorithm | Size | Pass... | SHA-256 Fingerprint | MD5 Fingerprint | Bubble Babble | Comment |
|----------|-----------|------|---------|---------------------|-----------------|---------------|---------|
| Client keys supported by the current crypto provider (1): | | | | | | | |
| Profile 1 | RSA | 2048 | no | | 01:c3:75:... | xopib-gilib-volen-sy... | servidor a |

Importing OpenSSH Private Key ✕

Passphrase
●●●●●●●●

Continue    Cancel

Comment:            servidor amazon 2025-1
SHA-256 fingerprint:  F3iEo7TmfttV19abZLdWcSwFfs68uwPMR3J+hZqAG14
MD5 fingerprint:       52:4d:e4:01:c3:75:01:b3:9f:27:1a:b6:32:d4:e4:05
Bubble-babble:        xopib-gilib-volen-syhas-cigyg-vonon-gikep-zypam-rasep-ganom-lax

Generate New    Modify    Remove

Import    Export    Change Passphrase    More ▾

Desktop

23:12:52.316  Opened channel for client-to-server port forwarding from 127.0.0.1:60154 on 127.0.0.1:5432 to localhost:5432.
23:19:23.569  SFTP channel opened.
23:20:20.857  SFTP channel closed by user.
23:25:40.428  SFTP channel opened.
23:25:50.483  SFTP channel closed by user.

Log out    Exit

ubuntu@ip-172-31
authorized_keys
ubuntu@ip-172-31-11-152:~/.ssh$ cat id_aws_2025.pub >> authorized_keys
ubuntu@ip-172-31-11-152:~/.ssh$

---

**User Authentication** ✕

Connecting to: **18.119.107.166:22**

Username        ubuntu

Method          publickey

Client key      Profile 2

The public key has already been accepted.

Passphrase      |

OK    Cancel