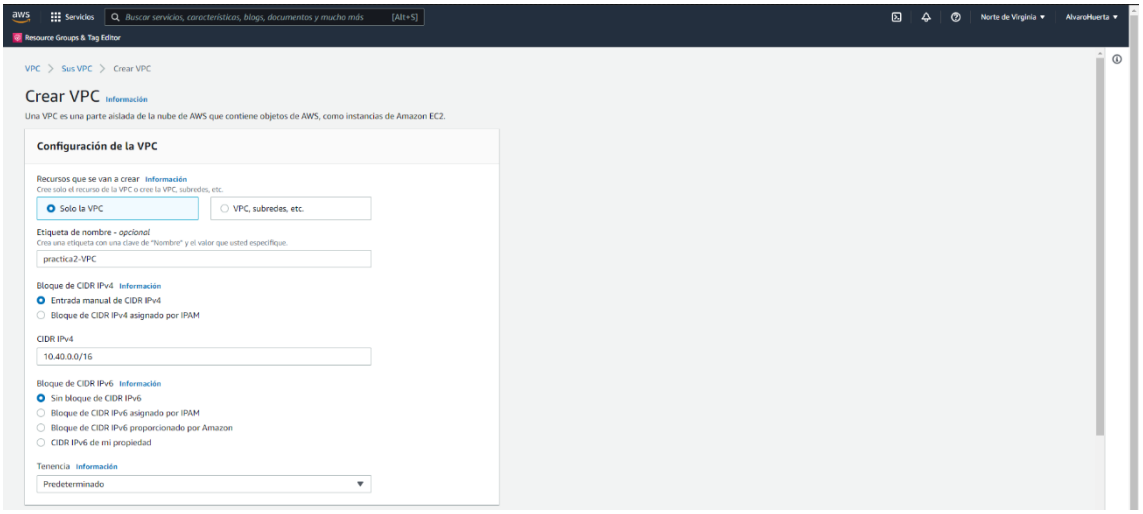
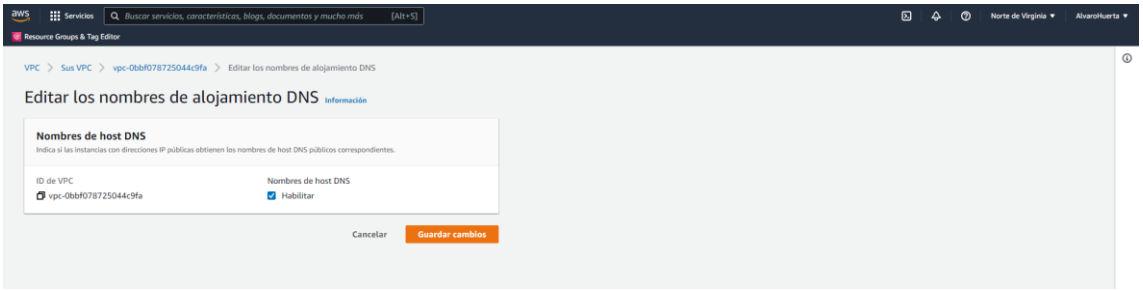
PRACTICA 2

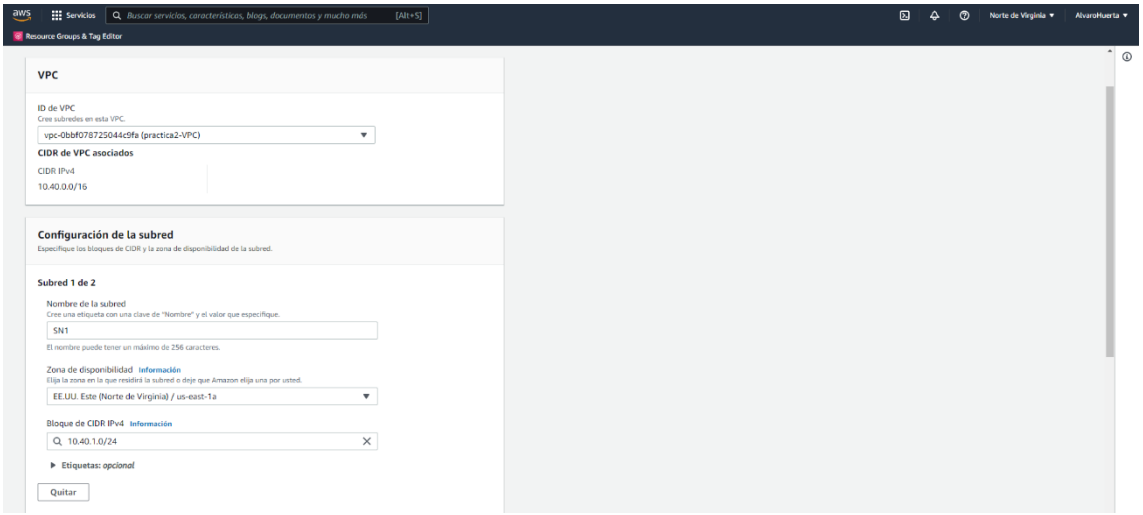
Creación de la VPC:



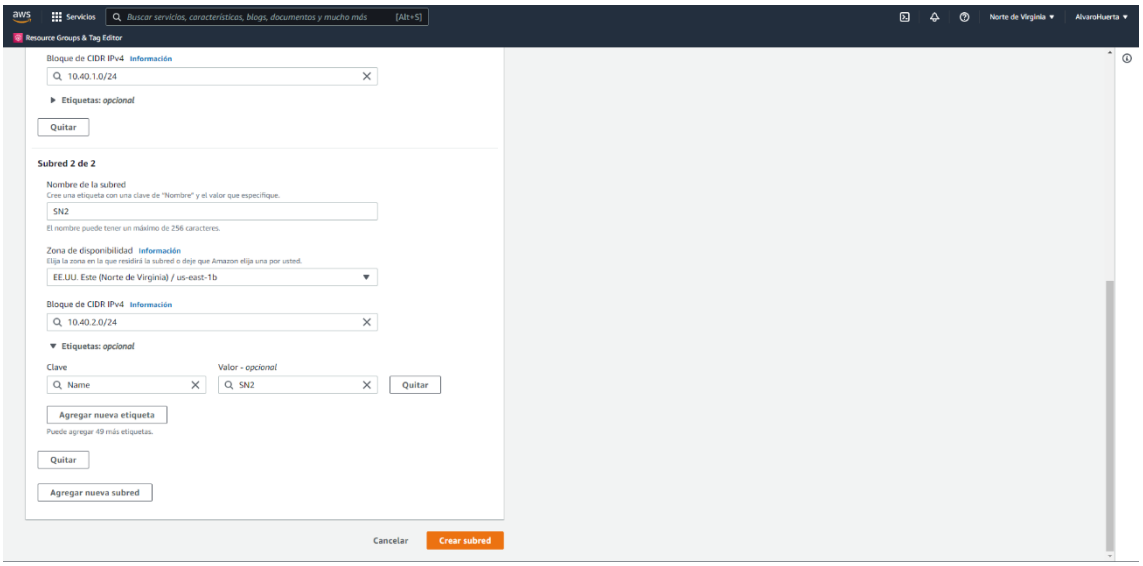
Habilitamos la opción de host DNS como nos solicita el enunciado:



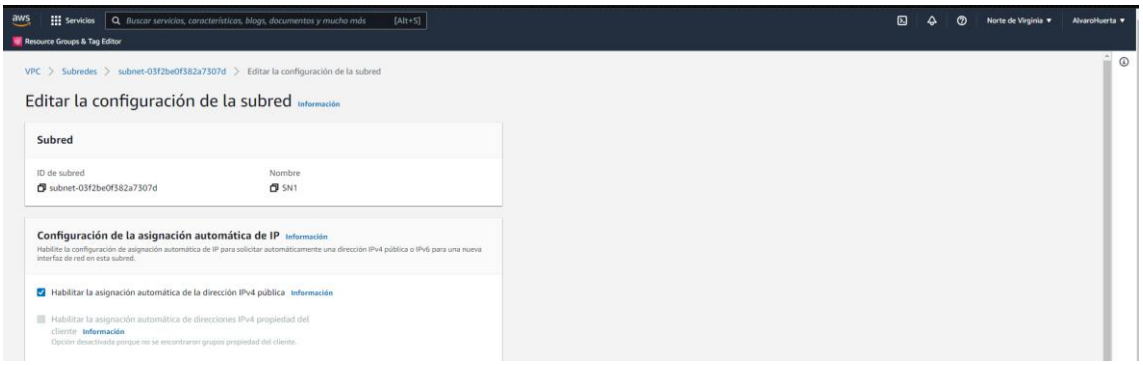
Creamos la primera subred SN1:



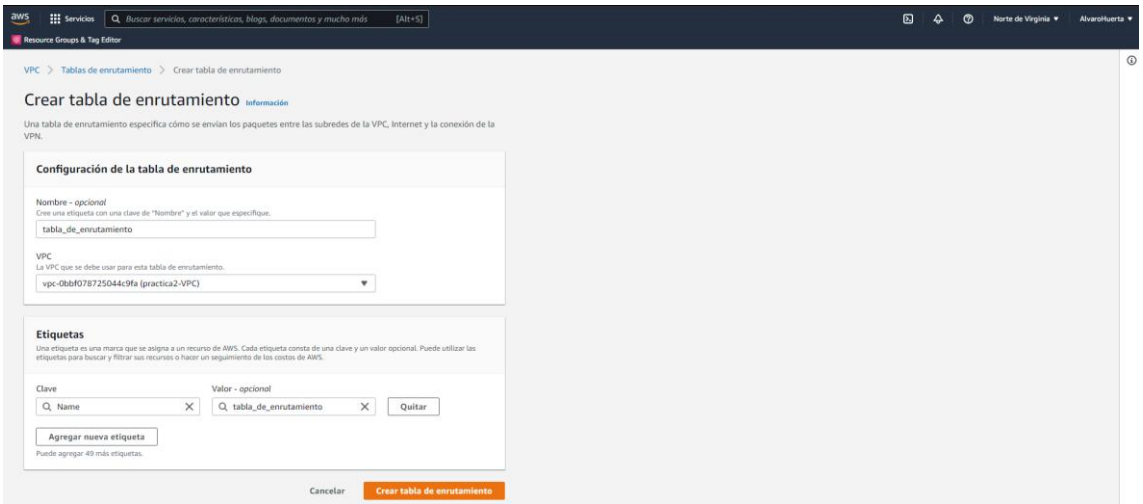
Creamos la segunda subred SN2:



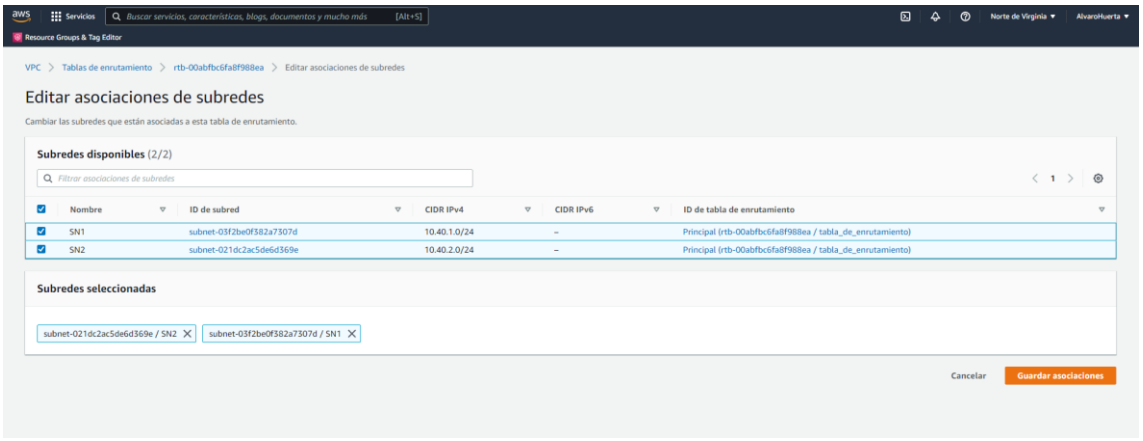
Activamos la asignación automática de ip:



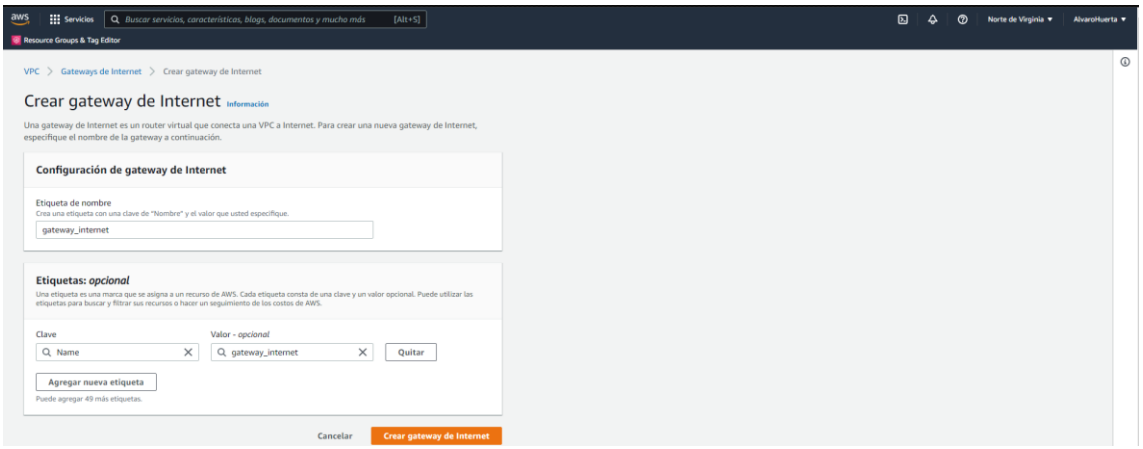
Creamos la tabla de enrutamiento:



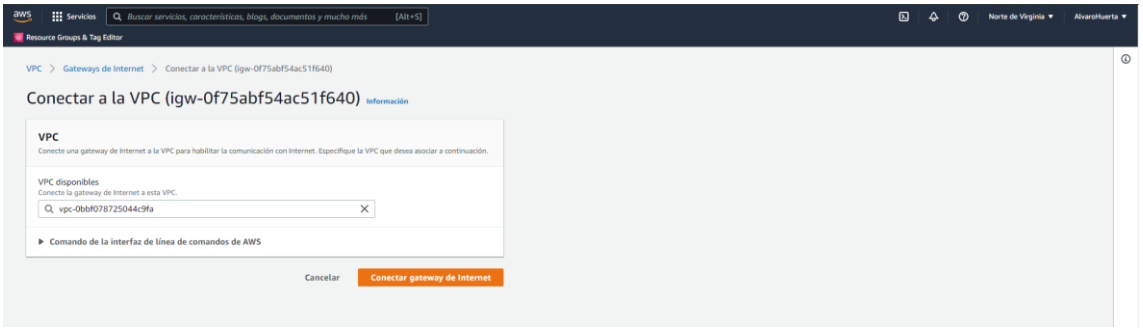
Asociamos las subredes a la tabla de enrutamiento creada:



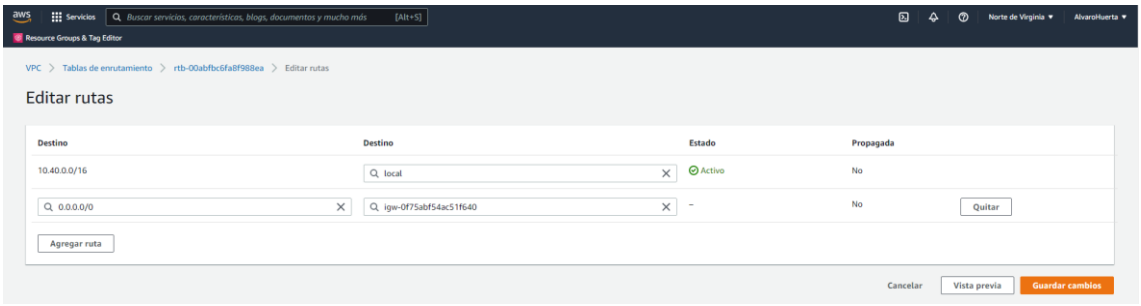
Creamos la gateway para conexión a internet:



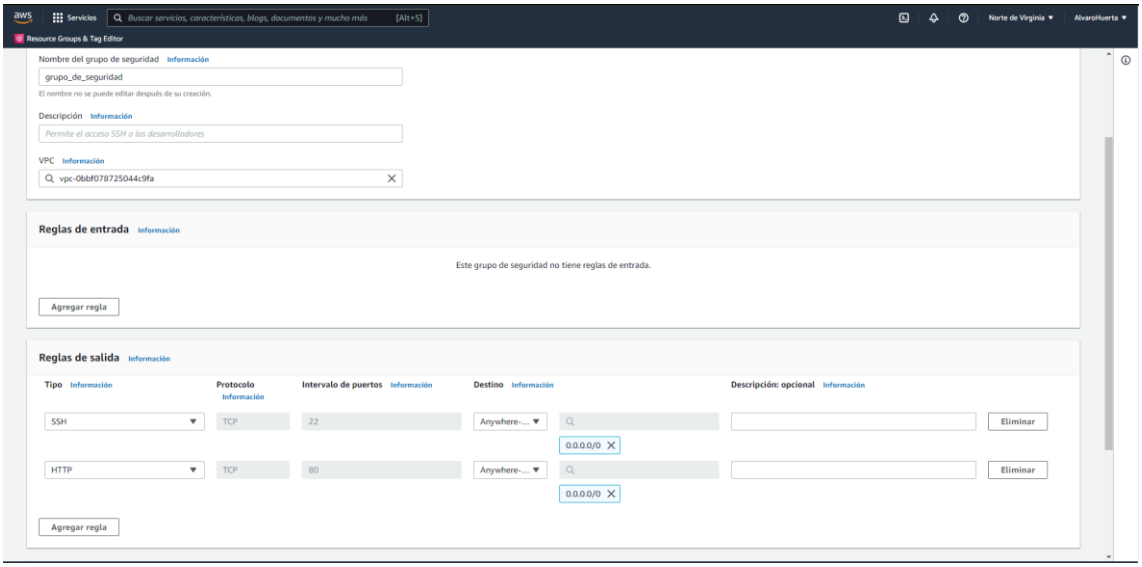
La vinculamos a nuestra VPC:



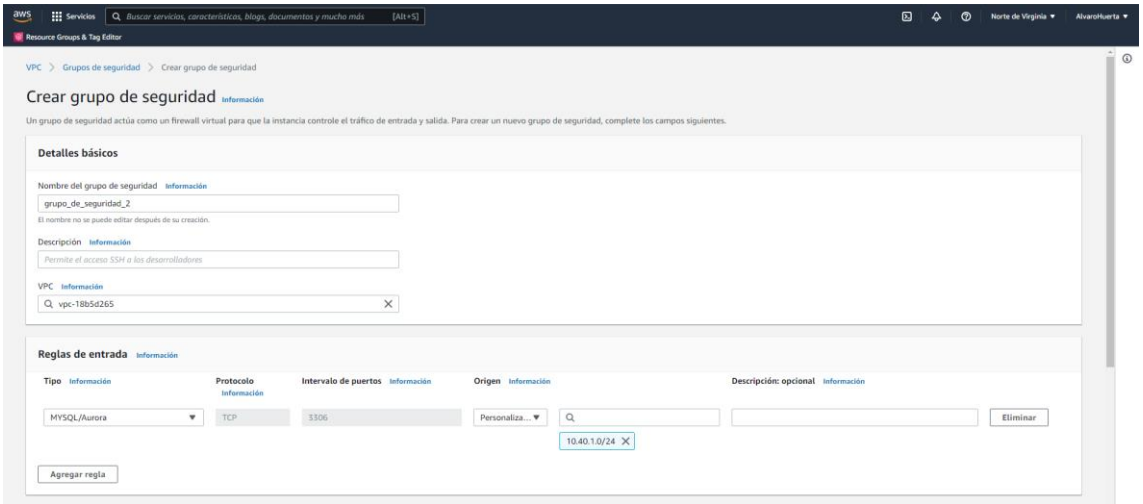
Añadimos en la tabla de rutas el acceso a internet:



Grupo de seguridad SN1:

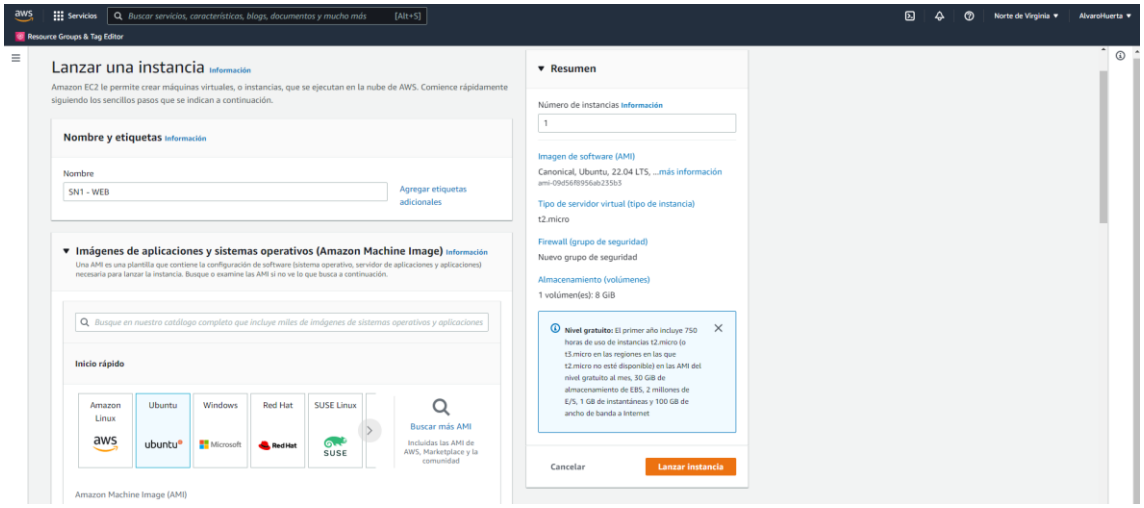


Grupo de seguridad SN2:

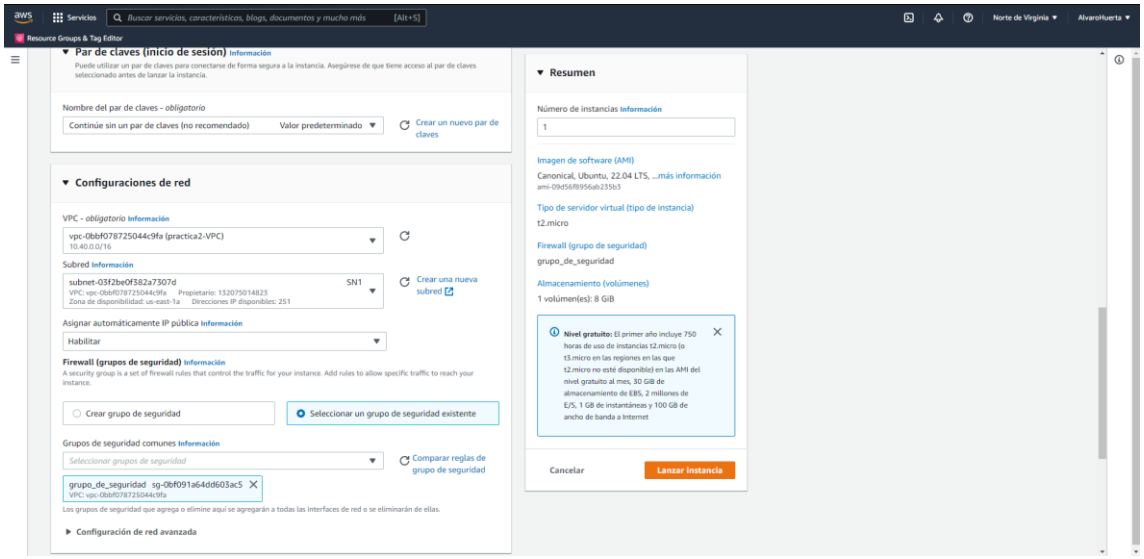


Creación EC2:

- Escogemos Ubuntu server:

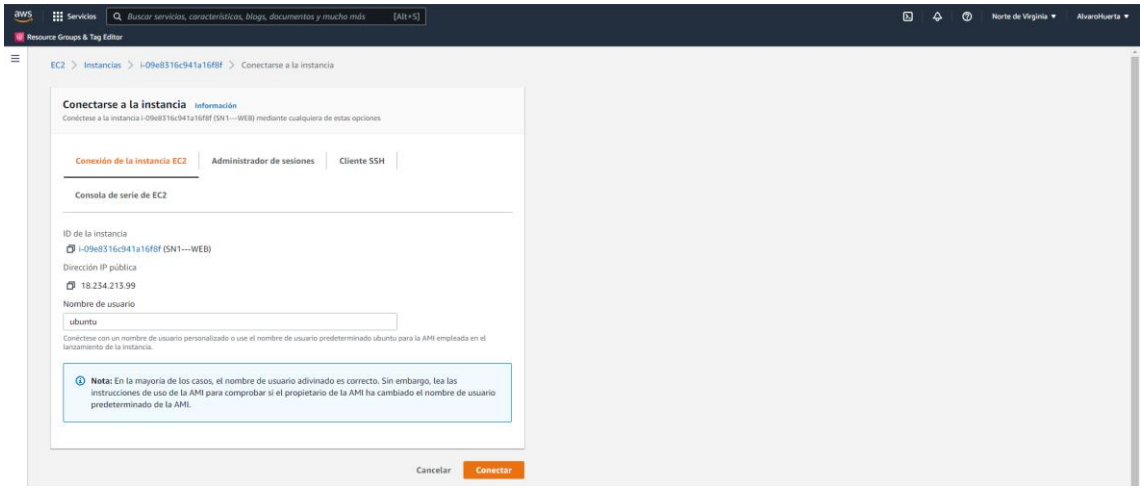


- Configuramos la red poniéndolo a nuestra VPC y asociado a la subred SN1 junto con nuestras reglas de seguridad creada:

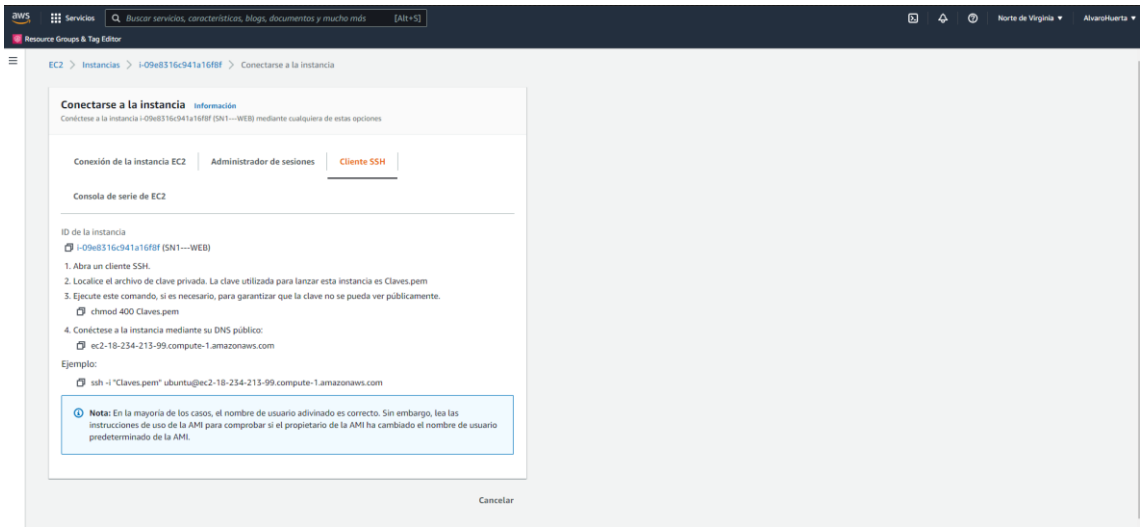


Conexión a nuestra EC2:

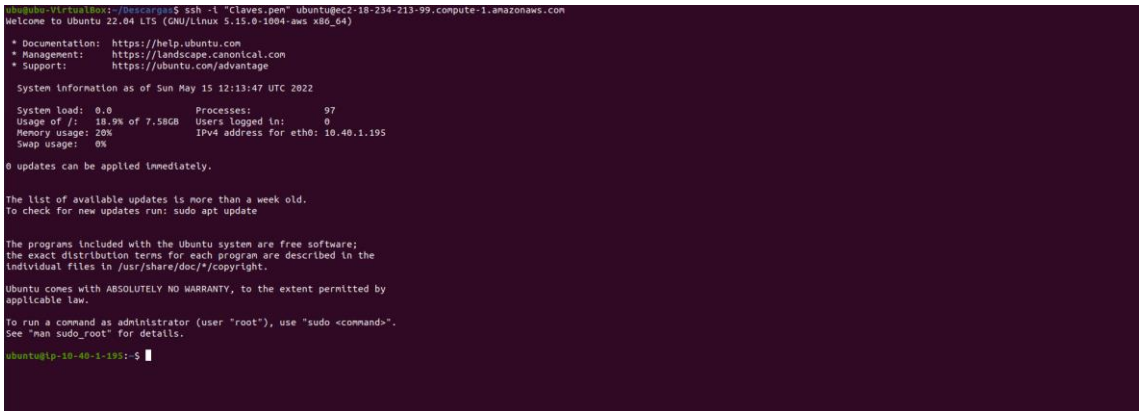
- IP de nuestra EC2:



- Comando de conexión a EC2:



- Comprobamos conexión:



Instalación página web:

- Actualizamos:

```
ubuntu@ip-10-40-1-195:~$ sudo apt-get update
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease [270 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [109 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [90.7 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [127 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [32.8 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [2288 B]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [56.2 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [9436 B]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [80.4 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [24.7 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [1184 B]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [116 B]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [112 B]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [116 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:24 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [69.5 kB]
Get:25 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [18.9 kB]
Get:26 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [1124 B]
Get:27 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [50.4 kB]
Get:28 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [8232 B]
Get:29 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [50.5 kB]
Get:30 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [14.5 kB]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [628 B]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [116 B]
Fetched 21.5 MB in 3s (6614 kB/s)
Reading package lists... Done
ubuntu@ip-10-40-1-195:~$
```

- Instalamos apache y mysql:

```
ubuntu@ip-10-40-1-195:~$ sudo apt-get install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils bzip2 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.3-0 mailcap mime-support ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser bzip2-doc
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils bzip2 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.3-0 mailcap mime-support ssl-cert
0 upgraded, 13 newly installed, 0 to remove and 28 not upgraded.
Need to get 2135 kB of archives.
After this operation, 8486 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libapr1 amd64 1.7.0-8build1 [107 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1 amd64 1.6.1-5ubuntu4 [92.4 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.1-5ubuntu4 [11.3 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1-ldap amd64 1.6.1-5ubuntu4 [9162 B]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 liblua5.3-0 amd64 5.3.6-1build1 [140 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 apache2-bin amd64 2.4.52-1ubuntu4 [1344 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 apache2-data all 2.4.52-1ubuntu4 [165 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 apache2-utils amd64 2.4.52-1ubuntu4 [88.8 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mailcap all 3.70+nmu1ubuntu1 [23.8 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mime-support all 3.66 [3696 B]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 apache2 amd64 2.4.52-1ubuntu4 [97.8 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bzip2 amd64 1.0.8-5build1 [34.8 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 ssl-cert all 1.1.2 [17.4 kB]
Fetched 2135 kB in 0s (31.3 MB/s)
Preconfiguring packages ...
Selecting previously unselected package libapr1:amd64.
(Reading database ... 63599 files and directories currently installed.)
Preparing to unpack .../00-libapr1_1.7.0-8build1_amd64.deb ...
Unpacking libapr1:amd64 (1.7.0-8build1) ...
Selecting previously unselected package libaprutil1:amd64.
Preparing to unpack .../01-libaprutil1_1.6.1-5ubuntu4_amd64.deb ...
Unpacking libaprutil1:amd64 (1.6.1-5ubuntu4) ...
```

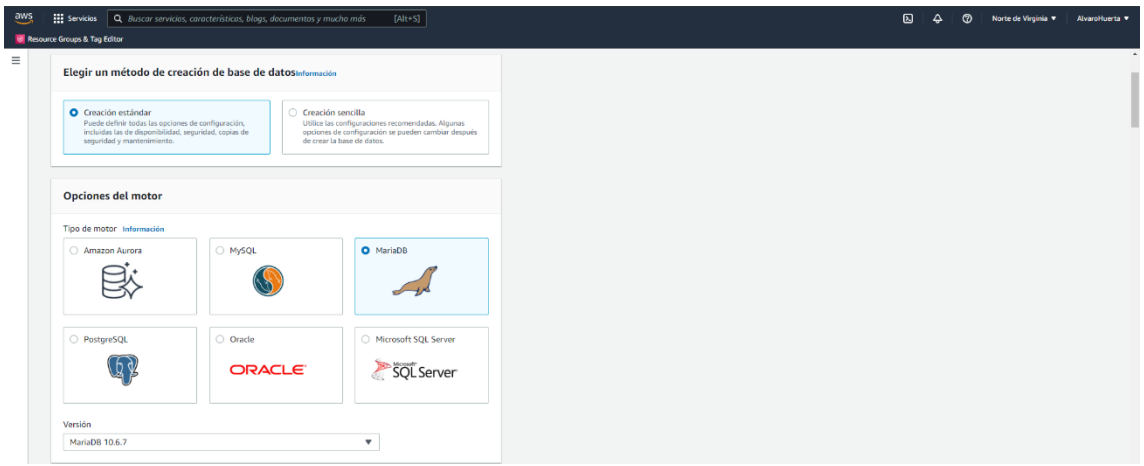
```
ubuntu@ip-10-40-1-195:~$ sudo apt-get install php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  php-common php8.1-common php8.1-mysql
The following NEW packages will be installed:
  php-common php-mysql php8.1-common php8.1-mysql
0 upgraded, 4 newly installed, 0 to remove and 28 not upgraded.
Need to get 1267 kB of archives.
After this operation, 9620 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php-common all 2:92ubuntu1 [12.4 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-common amd64 8.1.2-1ubuntu2 [1123 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php8.1-mysql amd64 8.1.2-1ubuntu2 [130 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php-mysql all 2:8.1+92ubuntu1 [1834 B]
Fetched 1267 kB in 0s (27.7 MB/s)
Selecting previously unselected package php-common.
(Reading database ... 64368 files and directories currently installed.)
Preparing to unpack .../php-common_2%3a92ubuntu1_all.deb ...
Unpacking php-common (2:92ubuntu1) ...
Selecting previously unselected package php8.1-common.
Preparing to unpack .../php8.1-common_8.1.2-1ubuntu2_amd64.deb ...
Unpacking php8.1-common (8.1.2-1ubuntu2) ...
Selecting previously unselected package php8.1-mysql.
Preparing to unpack .../php8.1-mysql_8.1.2-1ubuntu2_amd64.deb ...
Unpacking php8.1-mysql (8.1.2-1ubuntu2) ...
Selecting previously unselected package php-mysql.
Preparing to unpack .../php-mysql_2%3a8.1+92ubuntu1_all.deb ...
Unpacking php-mysql (2:8.1+92ubuntu1) ...
Setting up php-common (2:92ubuntu1) ...
```

- Iniciamos servicio:

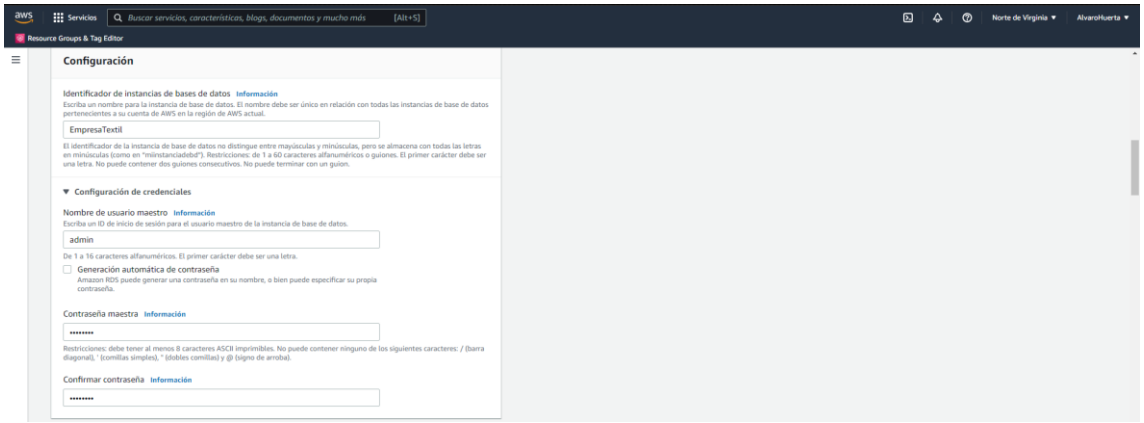
```
ubuntu@ip-10-40-1-195:~$ sudo service apache2 restart
ubuntu@ip-10-40-1-195:~$
```

- Comprobamos que está hecha la página web:

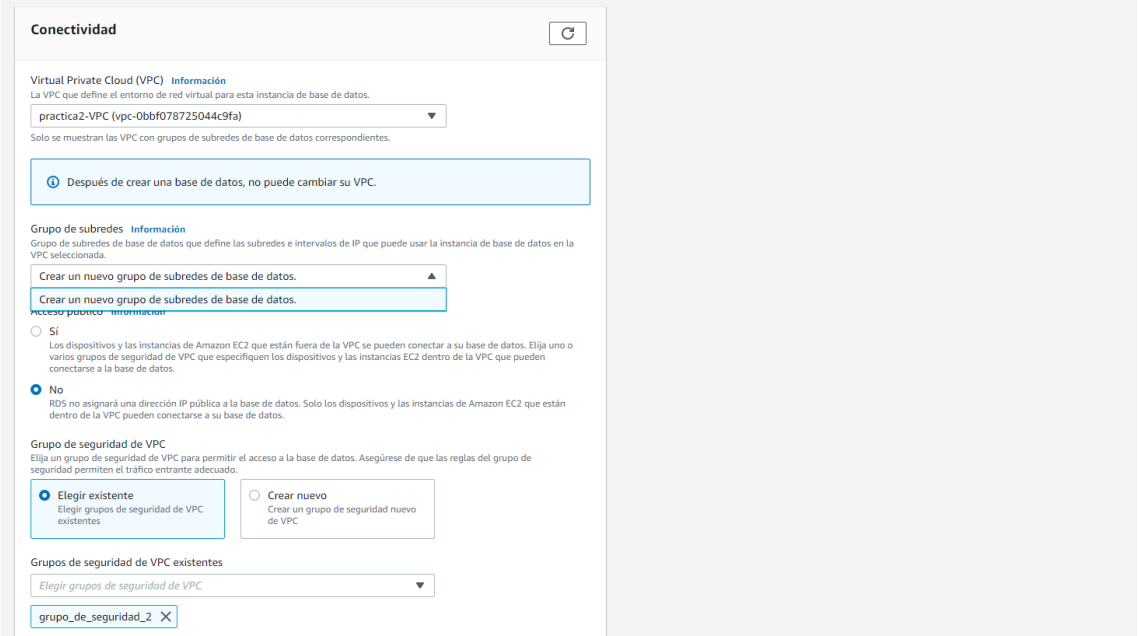
Creación de RDS:



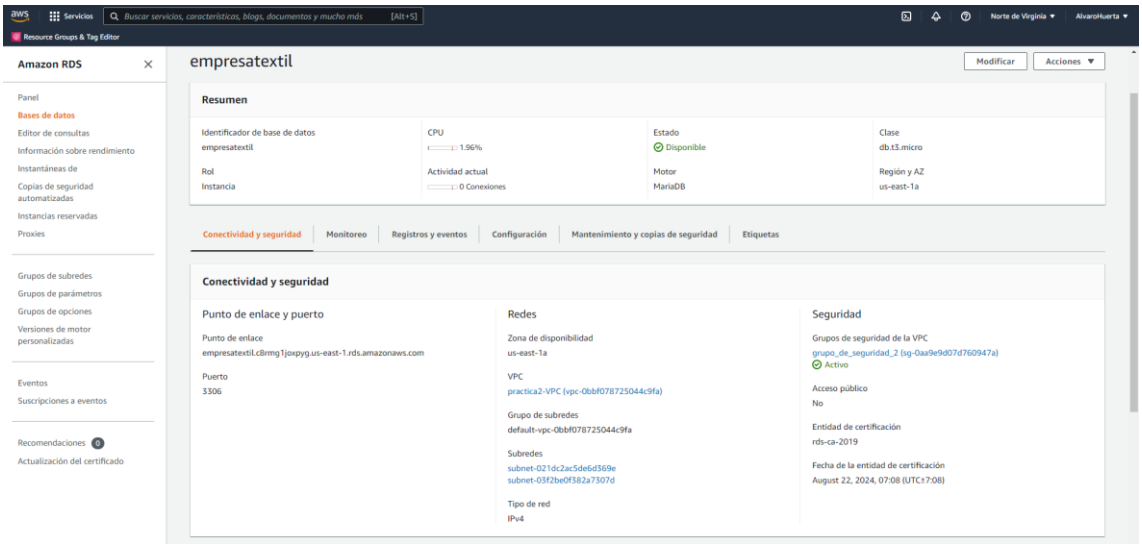
- Configuración de usuario:



- Configuración de VPC, subred (SN2), reglas de seguridad:
  Nota: no me aparecía la subred SN2 y no logro comprender el por qué.



- Detalles de RDS creada:



Intento de conexión a la RDS:

```
ubu@ubu-VirtualBox:~/Descargas$ sudo mysql -h "empresatextil.c8rmg1joxpyg.us-east-1.rds.amazonaws.com" -u admin -p
Enter password:
ERROR 2002 (HY000): Can't connect to MySQL server on 'empresatextil.c8rmg1joxpyg.us-east-1.rds.amazonaws.com' (115)
ubu@ubu-VirtualBox:~/Descargas$
```

Crear base de datos gestión_empresarial:

Si hubiese conseguido acceso haría lo siguiente:

CREATE DATABASE gestion_empresarial;

use gestion_empresarial;

CREATE TABLE Datos_Clientes (Id_cliente INT, Nombre VARCHAR(100), Apellidos VARCHAR(100), email VARCHAR(100));

Configuración Conexión_MySQL.php: