CONFIGURANDO SSH Despliegue-2º DAW Sebastián Bermúdez Herrera

Lunes 21 febrero 2022

```
sebas@SebasUbuntuPC:~$ sudo docker run -it --name serverssh -p 2222:22 ubuntu:20.04
[sudo] contraseña para sebas:
root@b745d39277f0:/#
```

```
root@b745d39277f0:/# apt update
Get:1 http://archive.ubuntu.com/ubuntu focal InRelease [265 kB]
Get:2 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal/universe amd64 Packages [11.3 MB]
Get:6 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1557 kB]
Get:7 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [974 kB]
Get:8 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [25.8 kB]
Get:9 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [841 kB]
Get:10 http://archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [177 kB]
Get:11 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages [1275 kB]
Get:12 http://archive.ubuntu.com/ubuntu focal/restricted amd64 Packages [33.4 kB]
Get:13 http://archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1134 kB]
Get:14 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1984 kB]
Get:15 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [1042 kB]
Get:16 http://archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [29.4 kB]
Get:17 http://archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [50.8 kB]
Get:18 http://archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [24.8 kB]
Fetched 21.1 MB in 5s (4345 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
13 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@b745d39277f0:/#
```

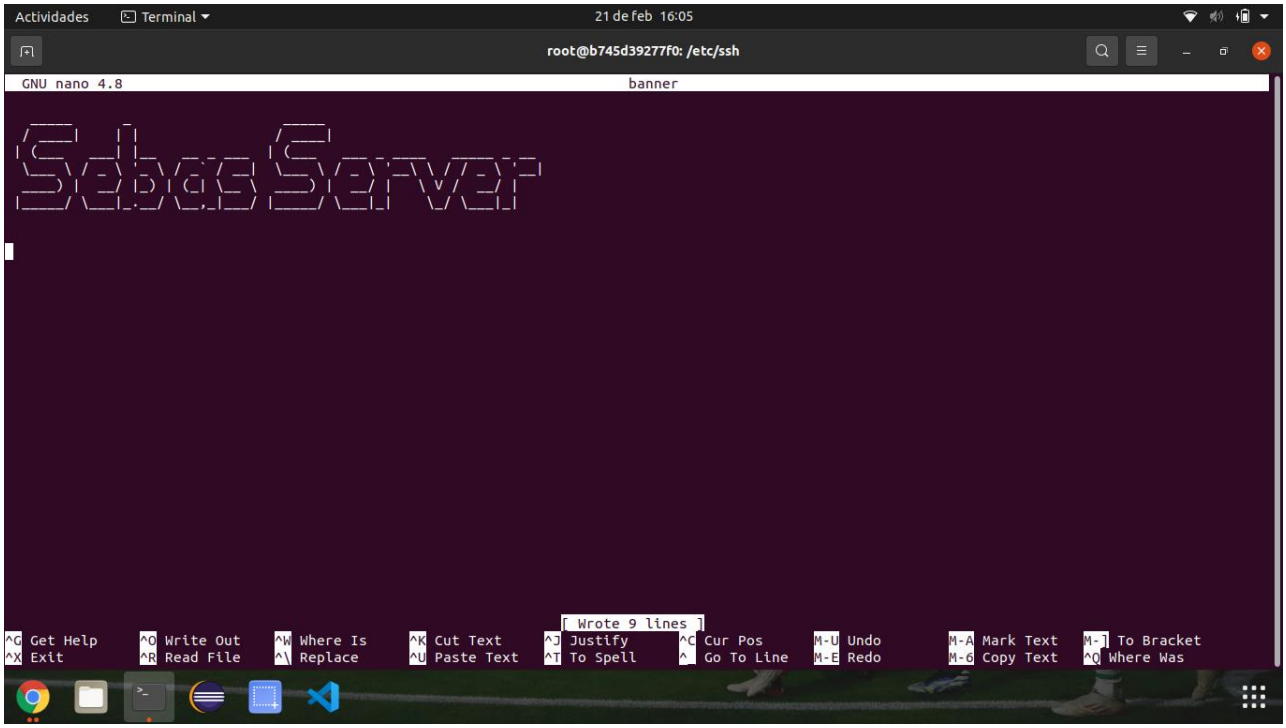
```
root@b745d39277f0:/# ls
bin  boot  dev  etc  home  lib  lib32  lib64  libx32  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@b745d39277f0:/# apt install ssh
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
```

```
root@b745d39277f0:/# service ssh start
 * Starting OpenBSD Secure Shell server sshd
root@b745d39277f0:/# service ssh status
 * sshd is running
root@b745d39277f0:/#
```

```
root@b745d39277f0:/# cd /etc/ssh
root@b745d39277f0:/etc/ssh# ls
moduli      ssh_config.d        ssh_host_ecdsa_key.pub  ssh_host_ed25519_key.pub  ssh_host_rsa_key.pub  sshd_config
ssh_config  ssh_host_ecdsa_key  ssh_host_ed25519_key    ssh_host_rsa_key          ssh_import_id         sshd_config.d
root@b745d39277f0:/etc/ssh#
```

```
root@b745d39277f0:/etc/ssh# apt install nano
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  hunspell
The following NEW packages will be installed:
  nano
0 upgraded, 1 newly installed, 0 to remove and 12 not upgraded.
Need to get 269 kB of archives.
After this operation, 868 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 nano amd64 4.8-1ubuntu1 [269 kB]
Fetched 269 kB in 0s (923 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package nano.
(Reading database ... 12088 files and directories currently installed.)
Preparing to unpack .../nano_4.8-1ubuntu1_amd64.deb ...
Unpacking nano (4.8-1ubuntu1) ...
Setting up nano (4.8-1ubuntu1) ...
update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link group ed
itor) doesn't exist
update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/pico.1.gz because associated file /usr/share/man/man1/nano.1.gz (of link group pico
) doesn't exist
root@b745d39277f0:/etc/ssh#
```

```
Actividades    Terminal ▾                    21 de feb  16:03
root@b745d39277f0: /etc/ssh
  GNU nano 4.8                    sshd_config                    Modified
#PermitTTY yes
PrintMotd no
#PrintLastLog yes
#TCPKeepAlive yes
#PermitUserEnvironment no
#Compression delayed
#ClientAliveInterval 0
#ClientAliveCountMax 3
#UseDNS no
#PidFile /var/run/sshd.pid
#MaxStartups 10:30:100
#PermitTunnel no
#ChrootDirectory none
#VersionAddendum none

# no default banner path
Banner /etc/ssh/banner

# Allow client to pass locale environment variables
AcceptEnv LANG LC_*

# override default of no subsystems
Subsystem       sftp    /usr/lib/openssh/sftp-server

# Example of overriding settings on a per-user basis
#Match User anoncvs
#       X11Forwarding no
#       AllowTcpForwarding no
#       PermitTTY no
#       ForceCommand cvs server

^G Get Help    ^O Write Out   ^W Where Is    ^K Cut Text    ^J Justify     ^C Cur Pos     M-U Undo       M-A Mark Text  M-] To Bracket
^X Exit        ^R Read File   ^\ Replace     ^U Paste Text  ^T To Spell    ^_ Go To Line  M-E Redo       M-6 Copy Text  ^Q Where Was
```



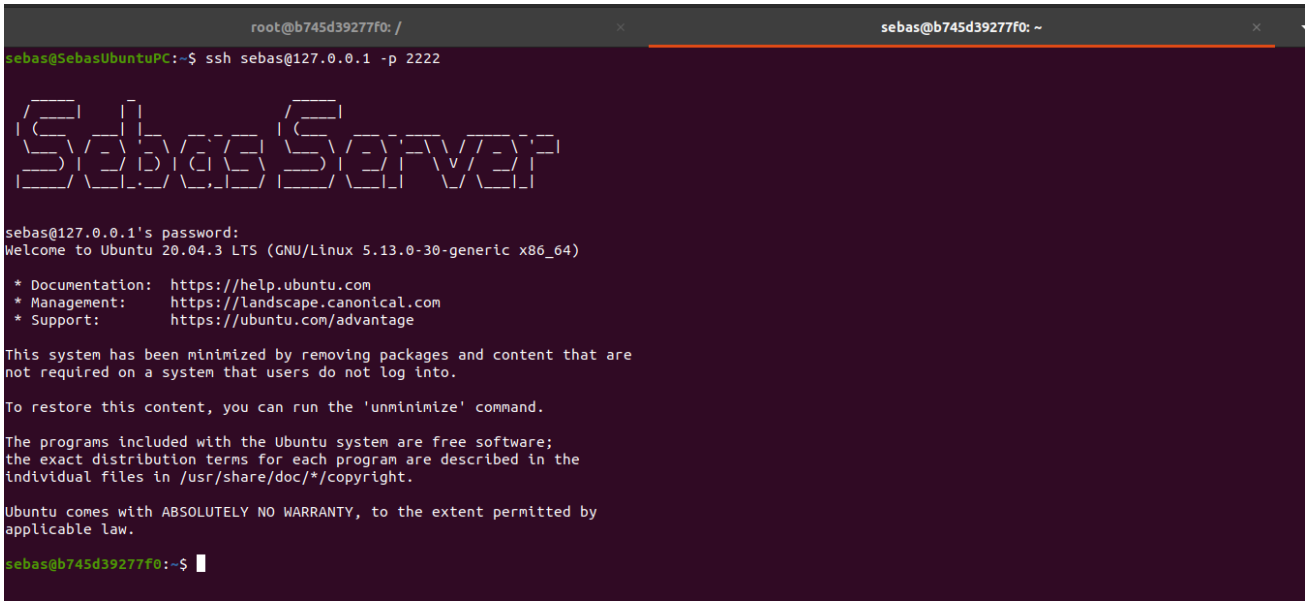
Contraseña = sebas

```
root@b745d39277f0:/etc/ssh# adduser sebas
Adding user `sebas' ...
Adding new group `sebas' (1000) ...
Adding new user `sebas' (1000) with group `sebas' ...
Creating home directory `/home/sebas' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for sebas
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
root@b745d39277f0:/etc/ssh#
```

```
sebas@SebasUbuntuPC:~$ sudo docker start serverssh
[sudo] contraseña para sebas:
serverssh
sebas@SebasUbuntuPC:~$
sebas@SebasUbuntuPC:~$ ssh sebas@127.0.0.1 -p 2222
The authenticity of host '[127.0.0.1]:2222 ([127.0.0.1]:2222)' can't be established.
ECDSA key fingerprint is SHA256:+TLeIaZa3AzN3Z+JIKtyjEzEqcwU9SyeErr6mBewpoM.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[127.0.0.1]:2222' (ECDSA) to the list of known hosts.
Connection closed by 127.0.0.1 port 2222
sebas@SebasUbuntuPC:~$
```

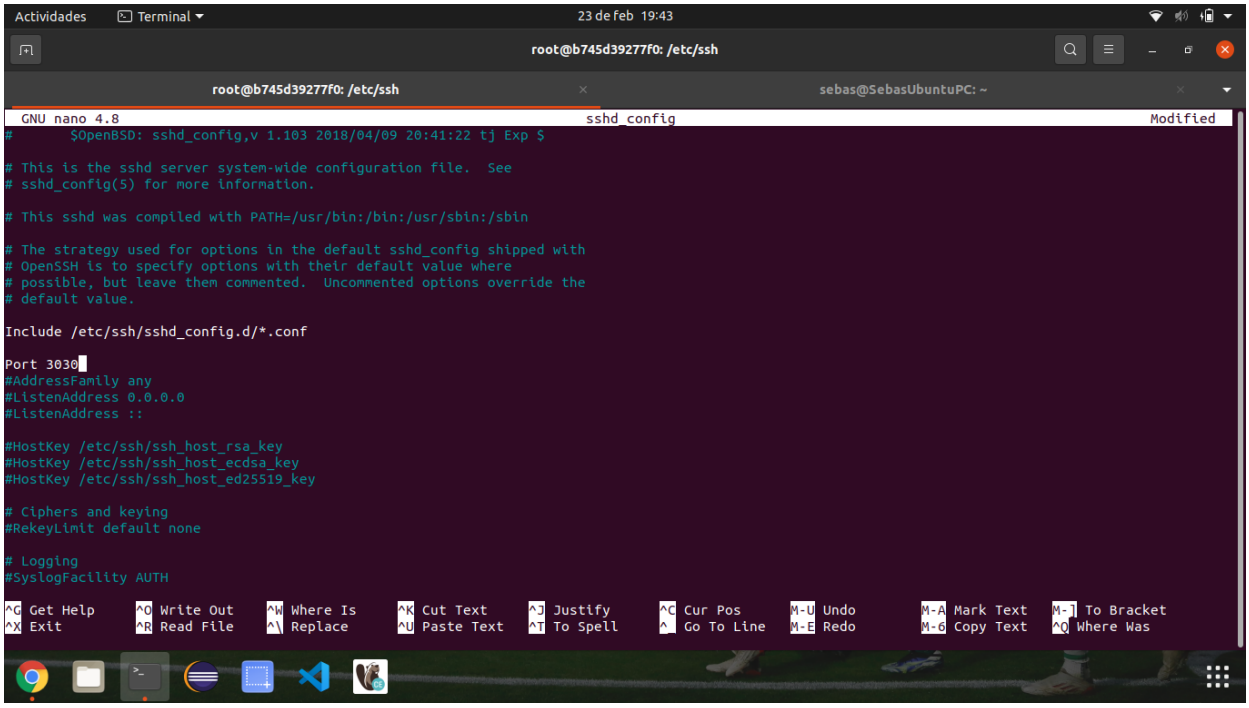
Miércoles 23 febrero 2022

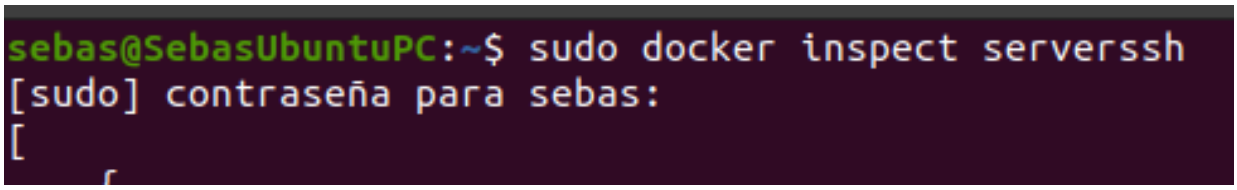
```
start: unrecognized service
sebas@SebasUbuntuPC:~$ sudo docker exec -it serverssh /bin/bash
root@b745d39277f0:/# service start ssh
start: unrecognized service
root@b745d39277f0:/# service ssh start
 * Starting OpenBSD Secure Shell server sshd
root@b745d39277f0:/# service ssh status
 * sshd is running
root@b745d39277f0:/#
```

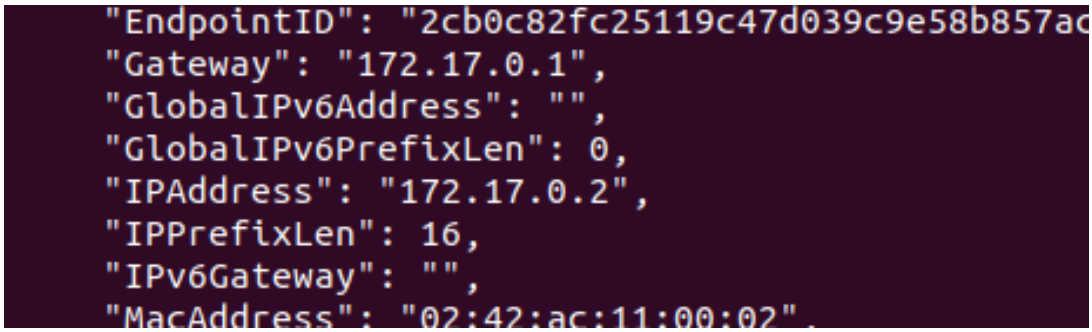


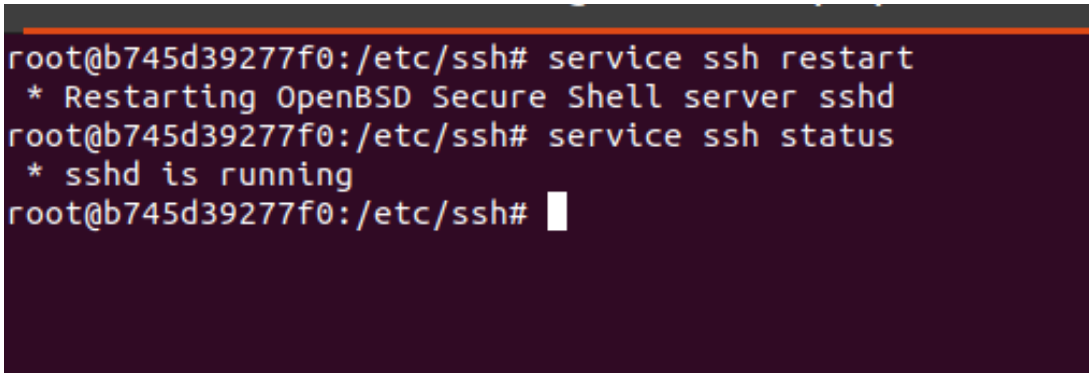
2.-Modificar el puerto

Cambiamos el puerto al 3030





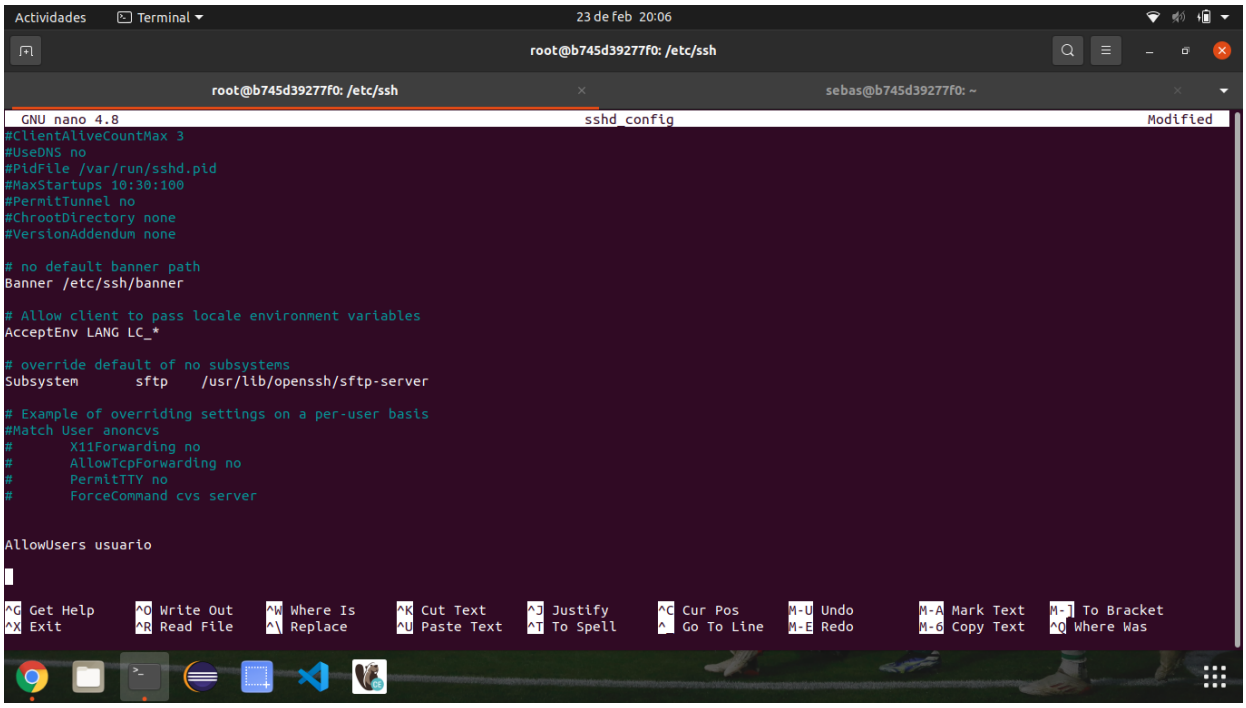




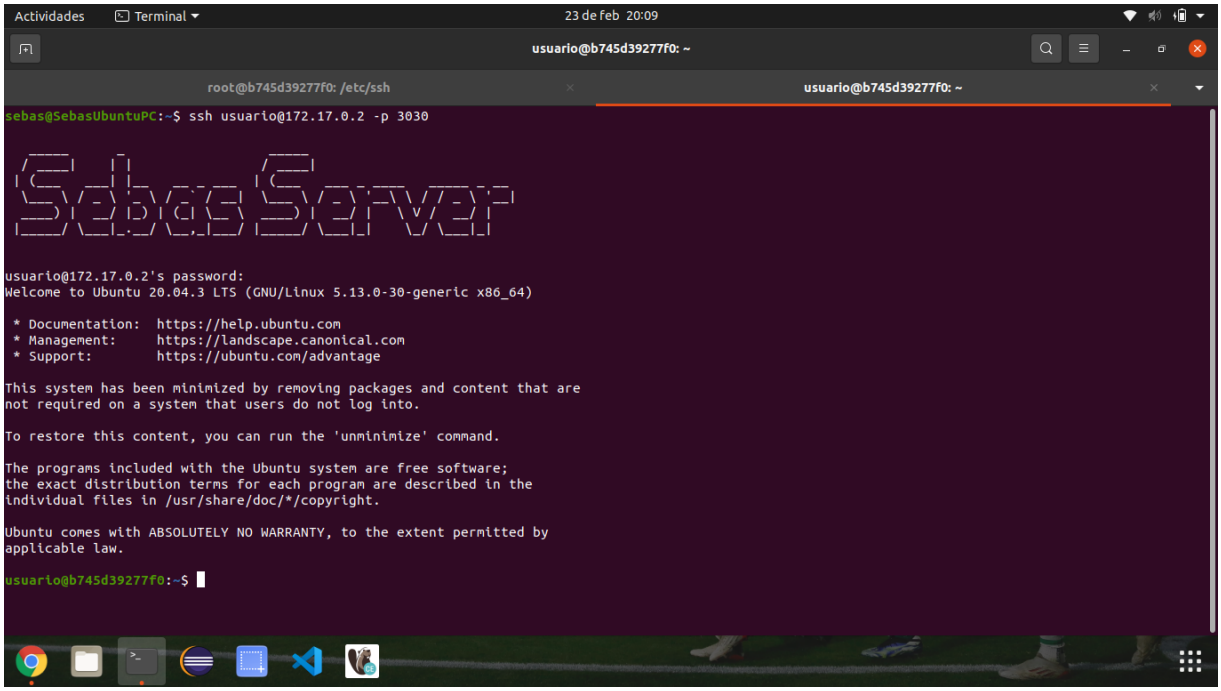
3.- Limitar el uso de servicio a determinados usuarios

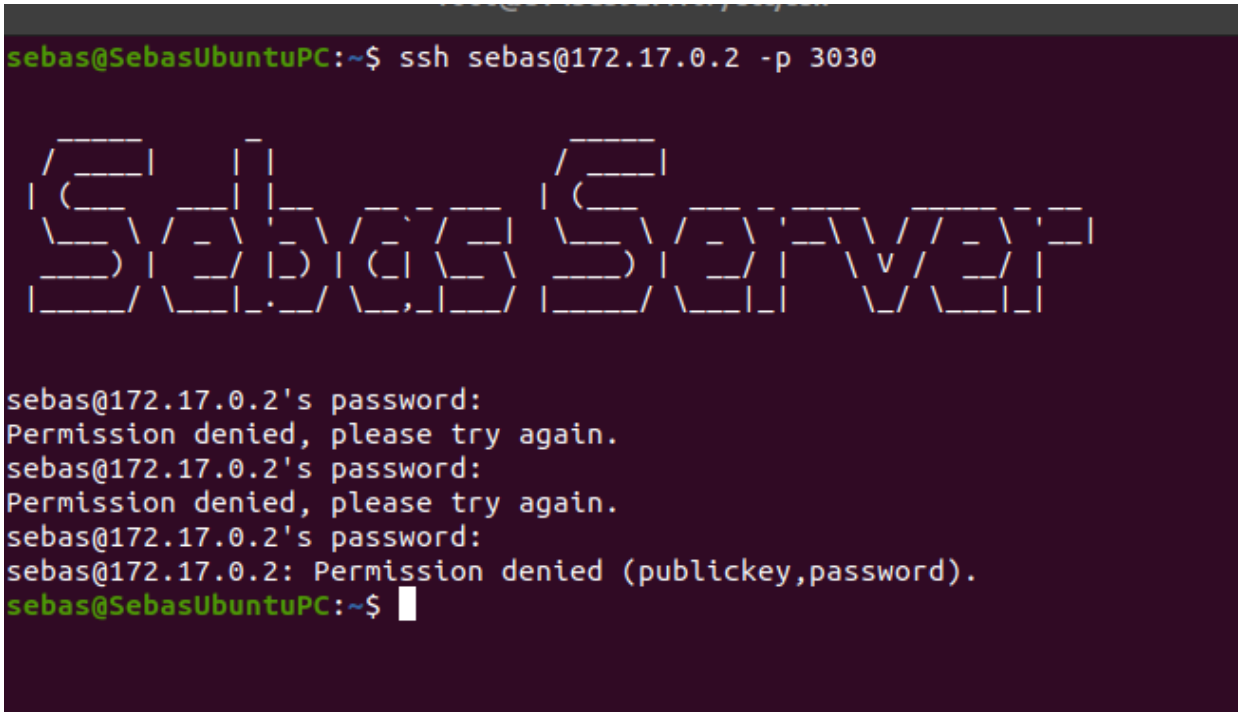
Contraseña: usuario

```
root@b745d39277f0:/etc/ssh# adduser usuario
Adding user `usuario' ...
Adding new group `usuario' (1001) ...
Adding new user `usuario' (1001) with group `usuario' ...
Creating home directory `/home/usuario' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for usuario
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
root@b745d39277f0:/etc/ssh#
```

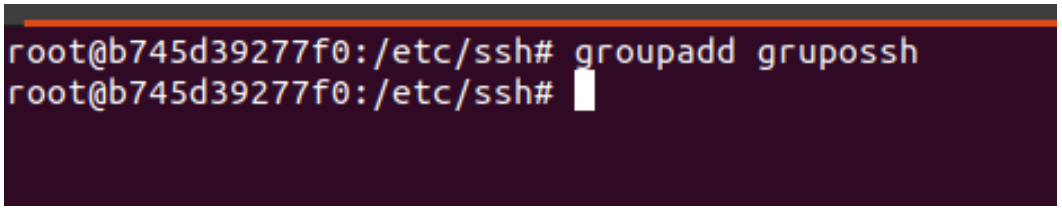



```
root@b745d39277f0:/etc/ssh# service ssh restart
 * Restarting OpenBSD Secure Shell server sshd
root@b745d39277f0:/etc/ssh# service ssh status
 * sshd is running
root@b745d39277f0:/etc/ssh#
```





4.- Limitar el uso de servicios a determinados grupos de usuarios.



```
root@b745d39277f0:/etc/ssh# groupadd gruposssh
root@b745d39277f0:/etc/ssh# usermod -G gruposssh usuario
root@b745d39277f0:/etc/ssh# adduser usuario2
Adding user `usuario2' ...
Adding new group `usuario2' (1003) ...
Adding new user `usuario2' (1002) with group `usuario2' ...
Creating home directory `/home/usuario2' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for usuario2
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
root@b745d39277f0:/etc/ssh# usermod -G gruposssh usuario2
root@b745d39277f0:/etc/ssh#
```

```
root@b745d39277f0:/etc/ssh# adduser usuario3
Adding user `usuario3' ...
Adding new group `usuario3' (1004) ...
Adding new user `usuario3' (1003) with group `usuario3' ...
Creating home directory `/home/usuario3' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for usuario3
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
root@b745d39277f0:/etc/ssh#
```

En sshd_config

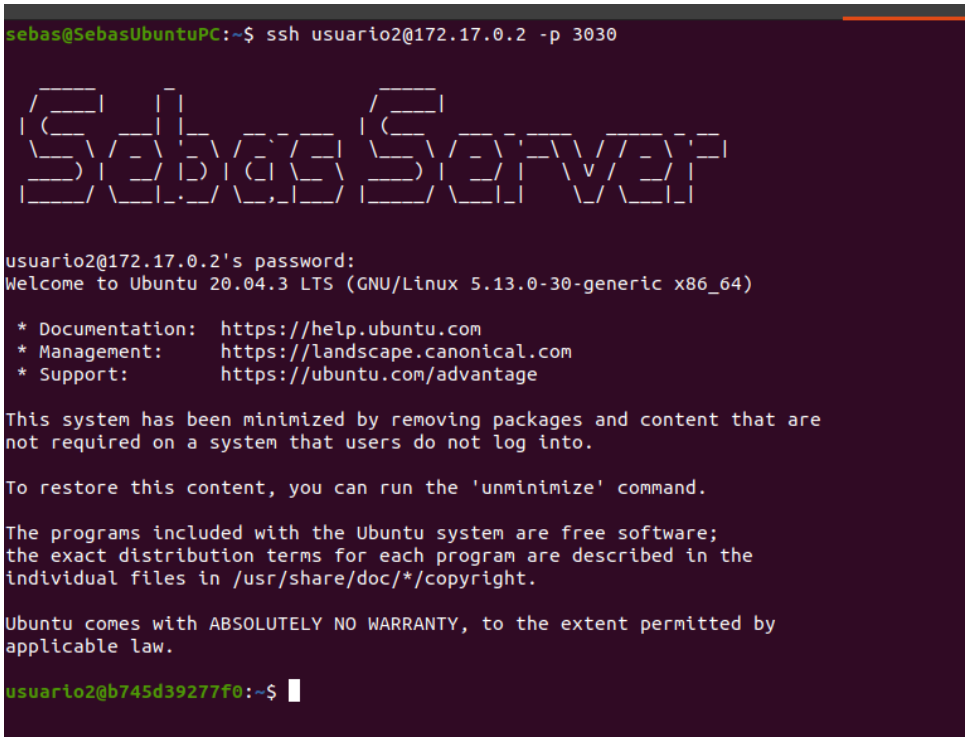
```
#AllowUsers usuario

AllowGroups gruposssh
```

```
root@b745d39277f0:/etc/ssh# service ssh restart
 * Restarting OpenBSD Secure Shell server sshd
root@b745d39277f0:/etc/ssh# service ssh status
 * sshd is running
root@b745d39277f0:/etc/ssh#
```

Usuario --> permitido

```
sebas@SebasUbuntuPC:~$ ssh usuario@172.17.0.2 -p 3030

usuario@172.17.0.2's password:
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.13.0-30-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

This system has been minimized by removing packages and content that are
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
Last login: Wed Feb 23 20:12:19 2022 from 172.17.0.1
usuario@b745d39277f0:~$
```

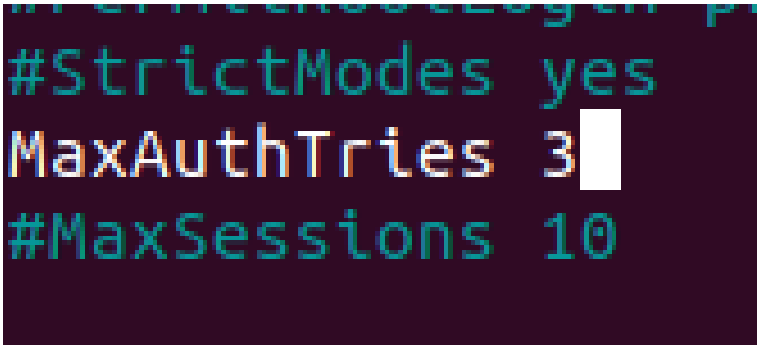
Usuario 2 --> permitido



Usuario 3 --> no permitido

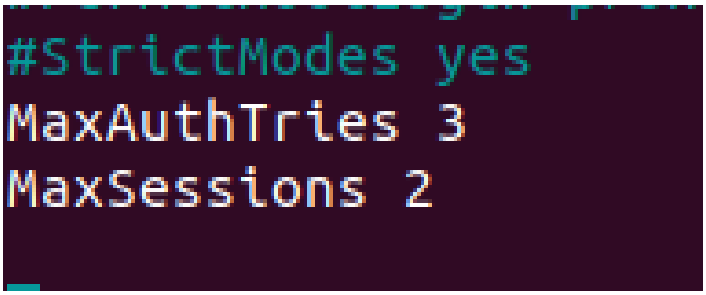
5.- Modificar el servidor SSH para que el numero maximo de intentos de login sea 3.

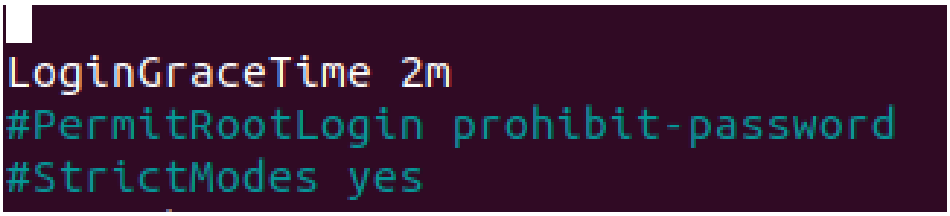
En el archivo de configuración sshd_config, ponemos MaxAuthTries y el nº de veces que queremos. En este caso será 3.



6.- Modificar el servidor SSH para que el numero maximo de usuarios a la vez en el sistema sea 2.

En el archivo de configuración sshd_config, ponemos MaxSessions y el nº de veces que queremos. En este caso será 2.



7.- Modificar el servidor SSH para que el tiempo de espera sea de 2 min.

En el archivo de configuración sshd_config, ponemos LoginGraceTime y el nº de minutos que queremos. En este caso será 2 min.