1. Generamos la key ssh con la siguiente comanda: ssh-keygen -t rsa -b 4096 -C "your_email@example.com"

```
l dani@archdani ~/.ssh % ssh-keygen -t rsa -b 4096 -C "your email@example.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/home/dani/.ssh/id rsa):
Enter passphrase (empty for no passphrase): Generating a new SSH ke
Enter same passphrase again:
Your identification has been saved in /home/dani/.ssh/id rsa.
Your public key has been saved in /home/dani/.ssh/id rsa.pub.
The key fingerprint is:
SHA256:9fdTsiPAROzDvAd+7bpfKXgC+7hSs3V2w8gD+K0h+N0 your email@example.com
The key's randomart image is:
+---[RSA 4096]----+
         ++
         =*0
        So++=.= .
         +==+0.Bo
        o.*=B+=o+
        . ooooEoo.
         .0..0+.
     [SHA256]----+
```

2. Enviamos la clave al servidor y nos conectamos automaticamente: sudo ssh-copy-id -i ~/.ssh/id_rsa.pub <u>funky@funkyserver</u> ssh funky@funkyserver

```
dani@archdani ~/.ssh % sudo ssh-copy-id -i ~/.ssh/id rsa.pub funky@funkyserver
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/dani/.ssh/id rs
a.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out
any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted
ow it is to install the new keys
funky@funkyserver's password:
Number of key(s) added: 1
Now try logging into the machine, with: "ssh 'funky@funkyserver'"
and check to make sure that only the key(s) you wanted were added.
dani@archdani ~/.ssh % ssh funky@funkyserver
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-96-generic x86 64)
 * Documentation:
                  https://help.ubuntu.com
                  https://landscape.canonical.com
 * Management:
 * Support:
                  https://ubuntu.com/advantage
Podeu actualitzar 114 paquets.
O actualitzacions són actualitzacions de seguretat.
Last login: Fri Oct 6 17:30:22 2017
funkv@funkvserver:~$
```

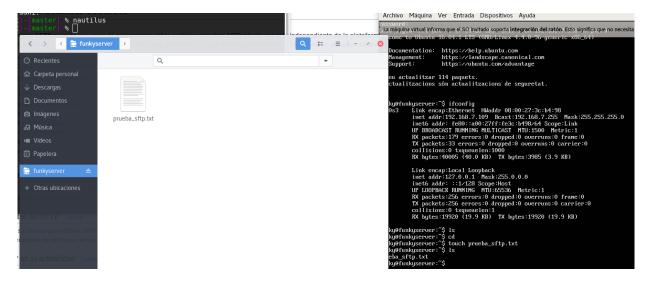
3.1 Acceder y navegar con nautilus por el servidor.

Te vas al nautilus y en la barra de la izquierda te aparece "otras ubicaciones".

Le das click y escribes "sftp://funkyserver" y le das enter para acceder.



Una vez estamos dentro, creamos un archivo de prueba y comprobamos que desde el cliente se puede visualizar.



3.2 Copiamos un archivo desde nuestra maquina al servidor. Del cliente al servidor:

```
dani@archdani ~ (git)-[master] % scp pruebaaa.txt funky@funkyserver:~/
pruebaaa.txt 100% 0 0.0KB/s 00:00
```

Del servidor al cliente:

```
1 dani@archdani ~ (git)-[master] % scp funky@funkyserver:~/prueba_sftp.txt . :(
prueba_sftp.txt 0 0.0KB/s 00:00
```

3.3 Subir carpeta con todo lo de dentro.

```
dani@archdani ~ (git)-[master] % scp -r PhpstormProjects/m07 funky@funkyserver:~/
pre-receive.sample
                                                       100% 544
                                                                    683.5KB/s
                                                                                  00:00
pre-push.sample
                                                       100% 1348
                                                                      1.6MB/s
                                                                                  00:00
applypatch-msg.sample
                                                              478
                                                                    636.7KB/s
                                                                                  00:00
pre-applypatch sample to scp a folder from remote to
                                                       100%
                                                              424
                                                                    684.6KB/s
                                                                                  00:00
post-update.sample ckoverflow.com/.../how-to-scp-a-folder-from-100%
                                                              189
                                                                    255.2KB/s
                                                                                  00:00
                                                                      4.7MB/s
pre-rebase.sample
                                                                                  00:00
prepare-commit-msg.sample rsively copy entire directories
                                                       100% 1239
                                                                      1.1MB/s
                                                                                  00:00
pre-commit.sample
                                                       100% 1642
                                                                       1.6MB/s
                                                                                  00:00
                   Can scp copy directories? - Server F100% 3610
                                                                      3.0MB/s
                                                                                  00:00
update.sample
commit-msg.sample_erverfault.com/guestions/.../can-scp-copy-dire 100%
                                                              896
                                                                    865.1KB/s
                                                                                  00:00
                                                       100%
exclude
                                                              240
                                                                    245.1KB/s
                                                                                  00:00
                                                       100%
                                                              41
                                                                     42.7KB/s
                                                                                  00:00
master
                                                               41
master
                                                       100%
                                                                      40.5KB/s
                                                                                  00:00
COMMIT_EDITMSG ubuntu - Can I scp a folder that has sub fol
                                                                      34.9KB/s
                                                                                  00:00
                                                       100%
                                                               38
                                                       100%
                                                                      23.3KB/s
                                                                                  00:00
                                                               23
                                                       100%
                                                              225
                                                                    219.4KB/s
                                                                                  00:00
index
master
                                                       100%
                                                              655
                                                                    673.2KB/s
                                                                                  00:00
master
                                                       100%
                                                              450
                                                                    422.6KB/s
                                                                                  00:00
HEAD
                                                       100%
                                                              655
                                                                    560.7KB/s
                                                                                  00:00
description Copying a Directory with SCP - Stack Abuse 100%
                                                               73
                                                                      78.4KB/s
                                                                                  00:00
                                      tory-with-scp/ * Tradu100%
                                                              275
                                                                    254.8KB/s
                                                                                  00:00
a63f8c1f6f77c6ea7493e58de6caa7414d664b
                                                              152
                                                       100%
                                                                    125.6KB/s
                                                                                  00:00
```

4.1 Editamos el archivo sshd_config que hay en el servir con la siguiente orden: sudo nano /etc/ssh/sshd_config

```
GNU nano 2.5.3

La máquina virtual informa que el SO invitado soporta integrac

# Package generated configuration file

# See the sshd_config(5) manpage for details

# What ports, IPs and protocols we listen for

Port 1022_

# Use these options to restrict which interfac
```

```
1 dani@archdani ~ (git) [master] % scp -P 1022 pruebaaa.txt funky@funkyserver:~/ :(
pruebaaa.txt 0 0.0KB/s 00:00
```

4.2 Le damos acceso al usuario james solamente.

Añadir esta linia al fichero nombrado en el punto anterior.

AllowUsers james

Creamos el usuario james y le damos una passwd: sudo useradd james sudo passwd james

Intentamos pasar un archivo con funky:

Nos pide la contraseña y nos dice permiso denegado.

```
dani@archdani ~ (git)-[master] % scp -P 1022 pruebaaa.txt funky@funkyserver:~/
funky@funkyserver's password:
Permission denied, please try again.
```

Intentamos pasarlo ahora con james:

4.3 Denegamos acceso a un rango de ip's:

en el servidor añadimos al archivo "/etc/hosts.deny" la linia "sshd: 192.168.7.0/255.255.255.0"

Probamos a pasar un archivo y no nos deja, tambien probamos a acceder al servidor y no deja. (he vuelto a permitir el acceso con el usuario funky).

```
dani@archdani ~ (git) master; % scp -P 1022 pruebaaa.txt james@funkyserver:~/
ssh_exchange_identification: read: Connection reset by peer
lost connection rict SSH login using SSH keys to a particular IP address ..

1 dani@archdani ~ (git) master; % ssh_funky@funkyserver - Tradueix aquesta pagina :
ssh: connect to host funkyserver port 22: Connection refused as Posted on
255 dani@archdani ~ (git) master; % ssh:-P 1022 funky@funkyserver :
ssh: connect to host 1022 port 22: Invalid argument
255 dani@archdani ~ (git) master; % ssh -p 1022 funky@funkyserver :
ssh_exchange_identification: read: Connection reset by peer :
ssh_exchange_identification: read: Connection reset by peer :
```