

# Práctica 2 – SWAP

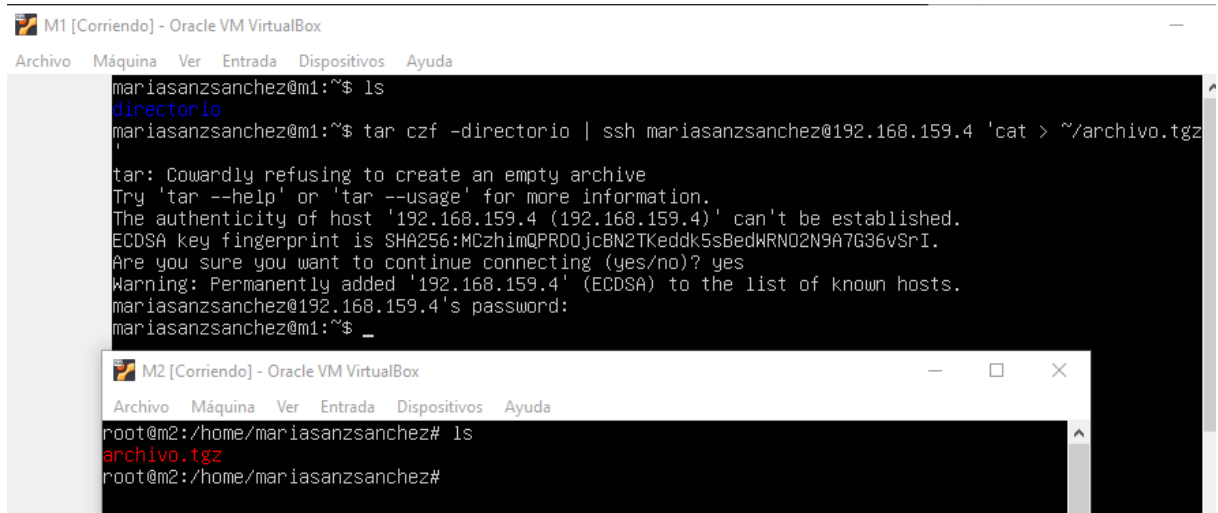
## Clonar la información de un sitio web

María Sanz Sánchez 77147710Y

### PASOS SEGUIDOS DURANTE LA PRÁCTICA:

1. Abrimos las dos máquinas virtuales creadas en la práctica anterior.
2. Creamos un directorio “directorio” en la máquina 1.
3. Ejecutamos el siguiente comando para realizar una copia comprimida de la carpeta mediante ssh:

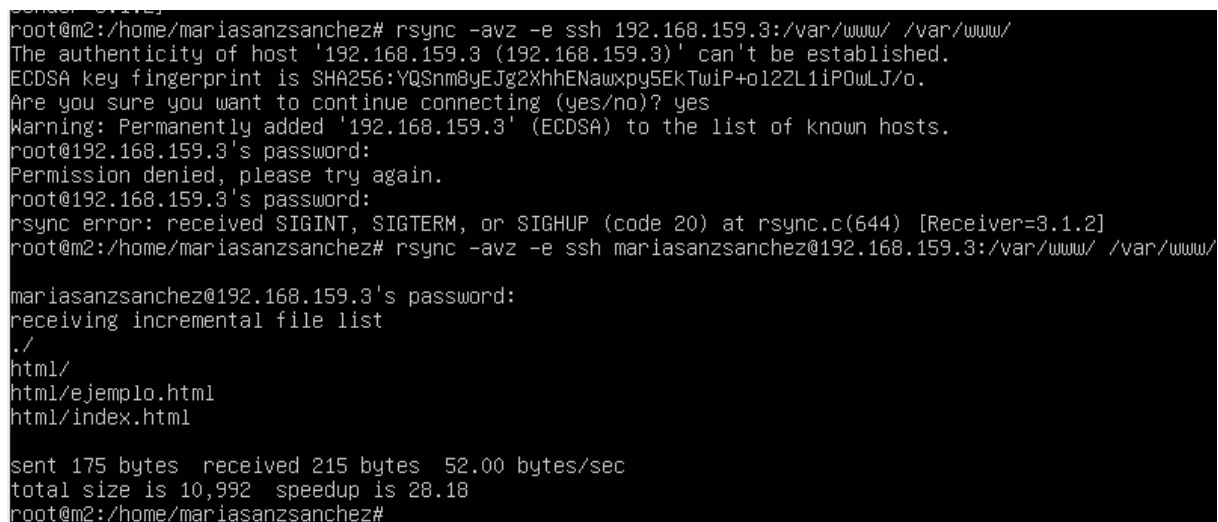
```
$ tar czf - directorio | ssh mariasanzsanchez@192.168.159.4 'cat > ~/tar.tgz'
```



The screenshot shows two overlapping terminal windows from Oracle VM VirtualBox. The top window, titled 'M1 [Corriendo] - Oracle VM VirtualBox', shows a terminal session for user 'mariasanzsanchez' on machine 'm1'. The user runs 'ls' and then 'tar czf - directorio | ssh mariasanzsanchez@192.168.159.4 'cat > ~/archivo.tgz''. The output shows a warning about the host's authenticity and a successful connection. The bottom window, titled 'M2 [Corriendo] - Oracle VM VirtualBox', shows a terminal session for user 'root' on machine 'm2'. The user runs 'ls' and the output shows 'archivo.tgz'.

4. Hacemos una copia de los archivos usando rsync, como lo estamos ejecutando con el usuario root, no tenemos que usar “chown”:

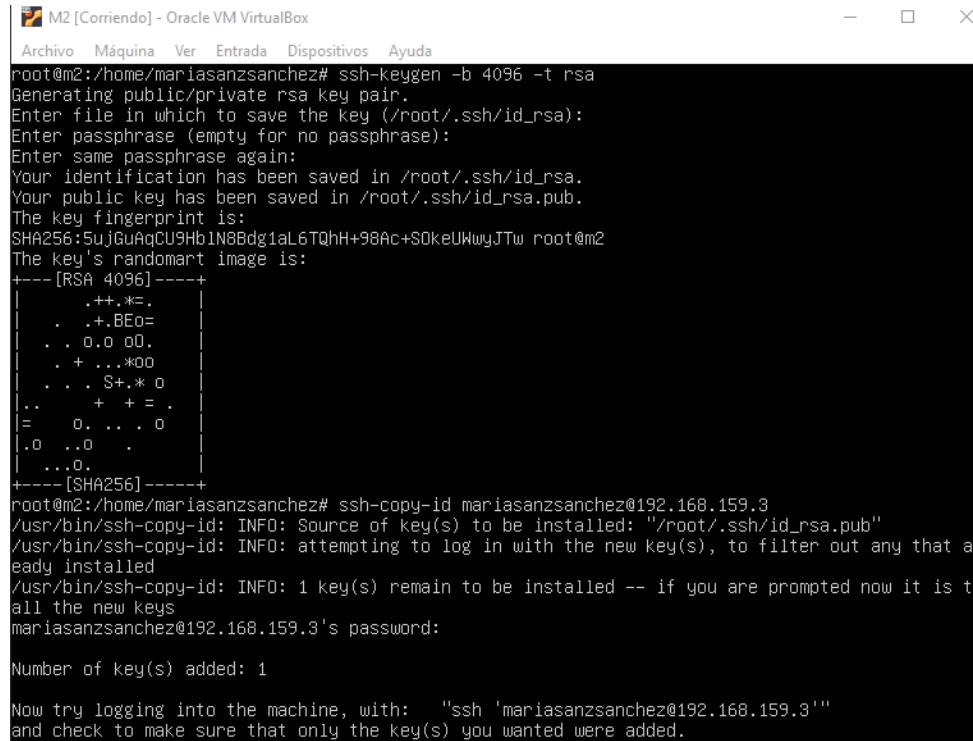
```
$ rsync -avz -e ssh mariasanzsanchez@192.168.159.4:/var/www/ /var/www/
```



The screenshot shows a terminal window for user 'root' on machine 'm2'. The user runs 'rsync -avz -e ssh 192.168.159.3:/var/www/ /var/www/'. The output shows a warning about the host's authenticity and a successful connection. The user then runs 'rsync -avz -e ssh mariasanzsanchez@192.168.159.3:/var/www/ /var/www/'. The output shows the password for 'mariasanzsanchez' and the files being transferred: 'html/' and 'html/ejemplo.html'. The final output shows the total size and speedup.

- Ahora configuraremos ssh para poder acceder a la otra máquina sin tener que introducir la contraseña. Esto lo haremos creando una llave publica y privada en una de nuestras máquinas con el siguiente comando:

*\$ ssh-keygen -b 4096 -t rsa*



```
M2 [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda
root@m2:/home/mariasanzsanchez# ssh-keygen -b 4096 -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:5uJGuAqCU9Hb1N8Bdg1aL6TQH+98Ac+S0keUWwyJTW root@m2
The key's randomart image is:
+---[RSA 4096]-----+
|      .+..*+=      |
|      .+.BEO=      |
|      . . 0.0 00.   |
|      .+ ...*00     |
|      . . . S+.* 0   |
|..      + + = .     |
|=      0. . . 0     |
|.0      ..0 .       |
|      ...0.         |
+---[SHA256]-----+
root@m2:/home/mariasanzsanchez# ssh-copy-id mariasanzsanchez@192.168.159.3
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/root/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that a
eady installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is t
all the new keys
mariasanzsanchez@192.168.159.3's password:

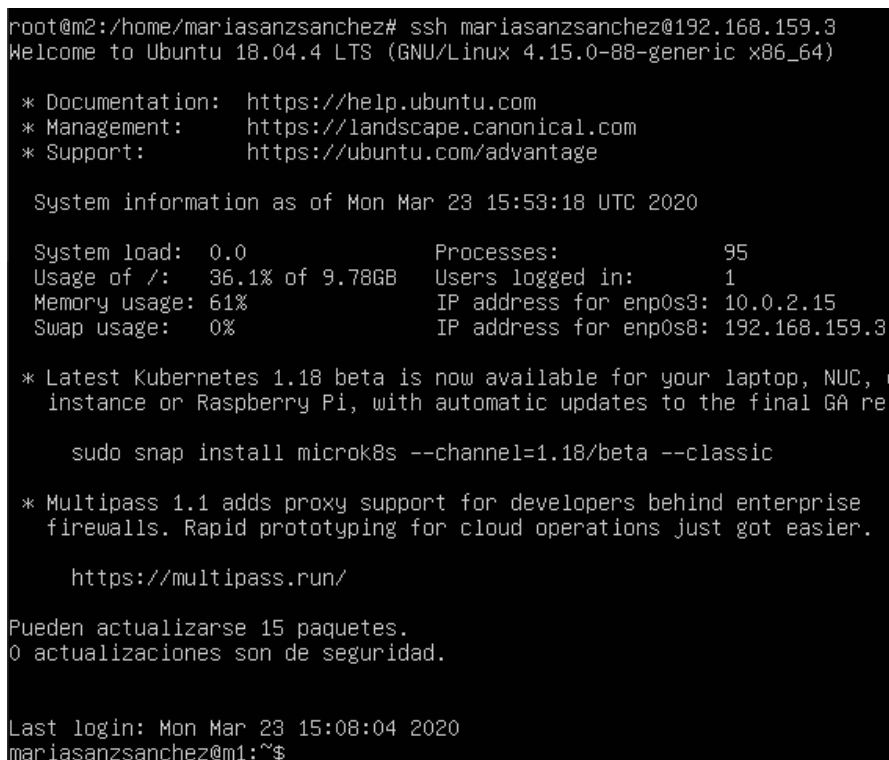
Number of key(s) added: 1

Now try logging into the machine, with:  "ssh 'mariasanzsanchez@192.168.159.3'"
and check to make sure that only the key(s) you wanted were added.
```

- Cuando ya tenemos generada la llave, la compartimos con la otra máquina de la siguiente manera:

*\$ ssh-copy-id mariasanzsanchez@192.168.159.3*

- Ya nos podemos conectar a la otra máquina sin necesidad de meter la contraseña.



```
root@m2:/home/mariasanzsanchez# ssh mariasanzsanchez@192.168.159.3
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-88-generic x86_64)

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

System information as of Mon Mar 23 15:53:18 UTC 2020

System load:  0.0               Processes:           95
Usage of /:   36.1% of 9.78GB   Users logged in:    1
Memory usage: 61%              IP address for enp0s3: 10.0.2.15
Swap usage:   0%               IP address for enp0s8: 192.168.159.3

 * Latest Kubernetes 1.18 beta is now available for your laptop, NUC, cloud
   instance or Raspberry Pi, with automatic updates to the final GA release.

   sudo snap install microk8s --channel=1.18/beta --classic

 * Multipass 1.1 adds proxy support for developers behind enterprise
   firewalls. Rapid prototyping for cloud operations just got easier.

   https://multipass.run/

Pueden actualizarse 15 paquetes.
0 actualizaciones son de seguridad.

Last login: Mon Mar 23 15:08:04 2020
mariasanzsanchez@m1:~$
```

8. Con respecto a las tareas cron, en el fichero /etc vamos a modificar el archivo crontab para establecer una tarea que se encargue de hacer una copia con rsync a las 00:00 de cada día. Lo escribimos de la siguiente manera:

```
* 00 * * * root rsync -avz -e ssh mariasanzsanchez@192.168.159.4:/var/www/ /var/www/
```

```
File crontab saved
File crontab not changed so no update needed
root@m2:/etc# cat crontab
# /etc/crontab: system-wide crontab
# Unlike any other crontab you don't have to run the `crontab'
# command to install the new version when you edit this file
# and files in /etc/cron.d. These files also have username fields,
# that none of the other crontabs do.

SHELL=/bin/sh
PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin

# m h dom mon dow user  command
17 * * * * root    cd / && run-parts --report /etc/cron.hourly
25 6 * * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.daily )
47 6 * * 7 root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.weekly )
52 6 1 * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.monthly )
* 00 * * * root    rsync -avz -e ssh mariasanz@192.168.159.3:/var/www/ /var/www/
#
root@m2:/etc# _
```

9. Por lo tanto, a las 00:00 de cada día se creará una copia en la segunda máquina