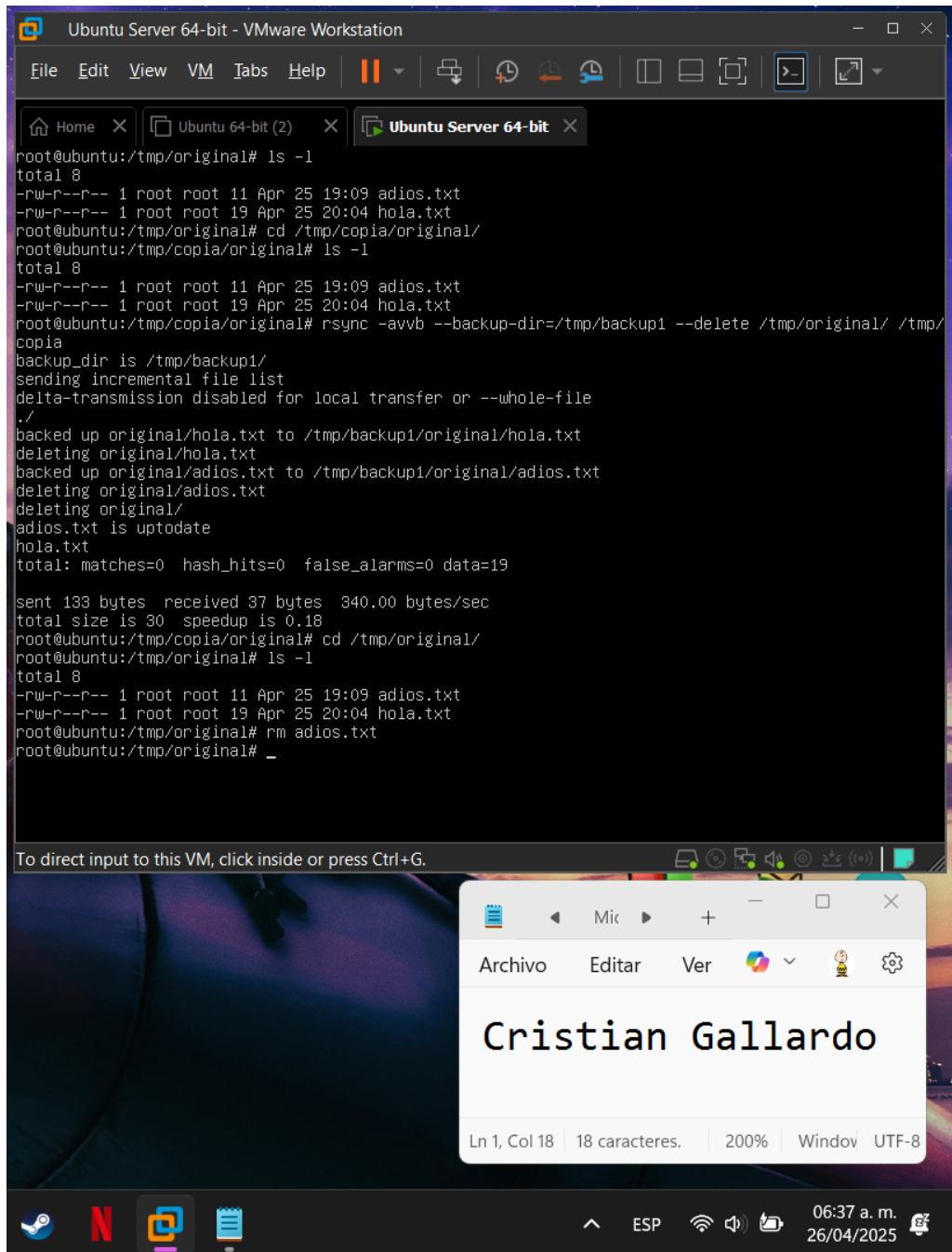


LABORATORIO Nro 7

Univ. Cristian Kevin Gallardo Coro

Desarrollo

Parte 2



```
Ubuntu Server 64-bit - VMware Workstation
File Edit View VM Tabs Help ||| Home X Ubuntu 64-bit (2) X Ubuntu Server 64-bit X

root@ubuntu:/tmp/original# ls -l
total 8
-rw-r--r-- 1 root root 11 Apr 25 19:09 adios.txt
-rw-r--r-- 1 root root 19 Apr 25 20:04 hola.txt
root@ubuntu:/tmp/original# cd /tmp/copia/original/
root@ubuntu:/tmp/copia/original# ls -l
total 8
-rw-r--r-- 1 root root 11 Apr 25 19:09 adios.txt
-rw-r--r-- 1 root root 19 Apr 25 20:04 hola.txt
root@ubuntu:/tmp/copia/original# rsync -avvb --backup-dir=/tmp/backup1 --delete /tmp/original/ /tmp/copia
copia
backup_dir is /tmp/backup1/
sending incremental file list
delta-transmission disabled for local transfer or --whole-file
./
backed up original/hola.txt to /tmp/backup1/original/hola.txt
deleting original/hola.txt
backed up original/adios.txt to /tmp/backup1/original/adios.txt
deleting original/adios.txt
deleting original/
adios.txt is uptodate
hola.txt
total: matches=0  hash_hits=0  false_alarms=0  data=19

sent 133 bytes  received 37 bytes  340.00 bytes/sec
total size is 30  speedup is 0.18
root@ubuntu:/tmp/copia/original# cd /tmp/original/
root@ubuntu:/tmp/original# ls -l
total 8
-rw-r--r-- 1 root root 11 Apr 25 19:09 adios.txt
-rw-r--r-- 1 root root 19 Apr 25 20:04 hola.txt
root@ubuntu:/tmp/original# rm adios.txt
root@ubuntu:/tmp/original# _
```

To direct input to this VM, click inside or press Ctrl+G.

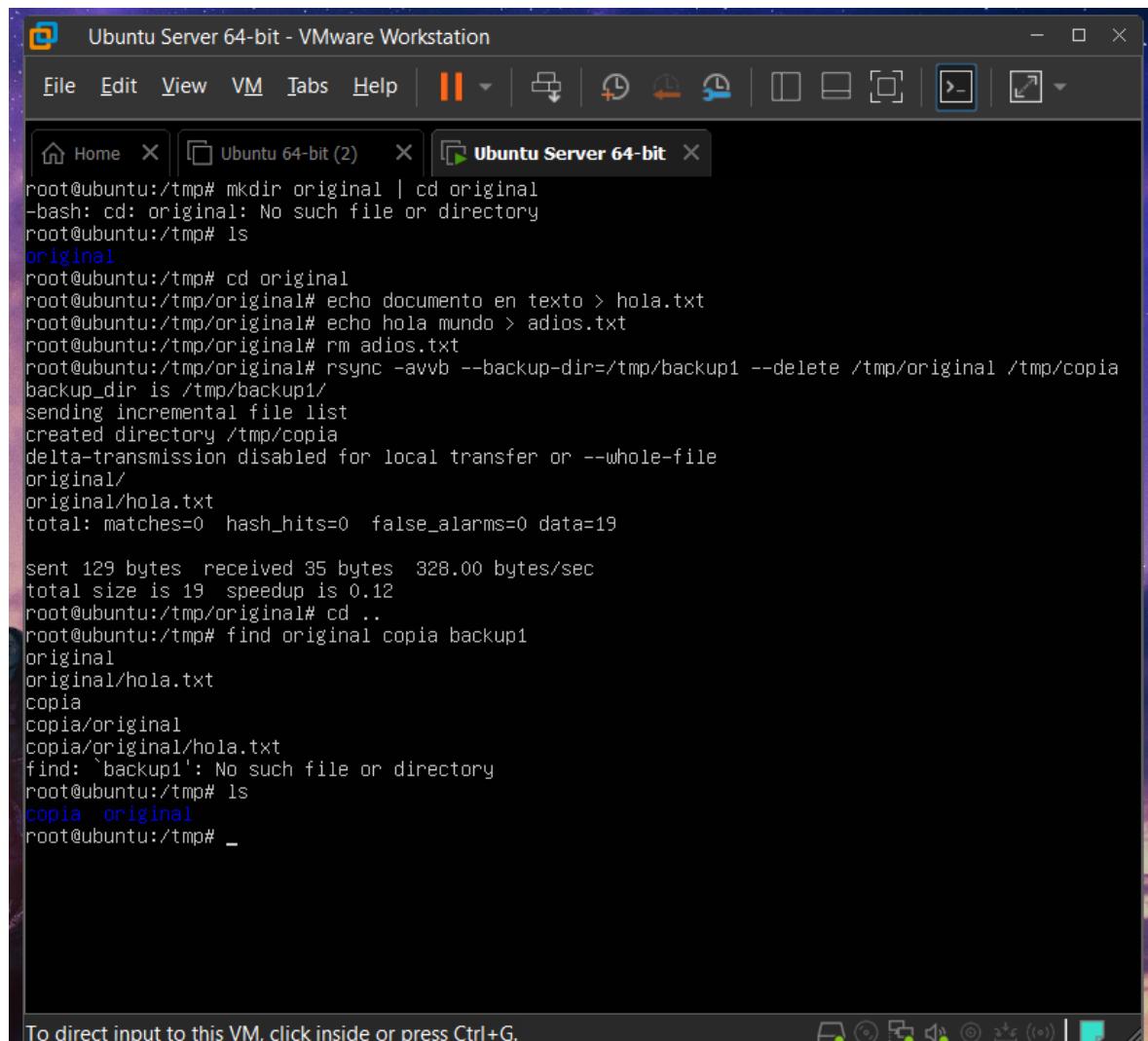
Archivo Editar Ver

Cristian Gallardo

Ln 1, Col 18 | 18 caracteres. | 200% | Window UTF-8

ESP 06:37 a.m. 26/04/2025

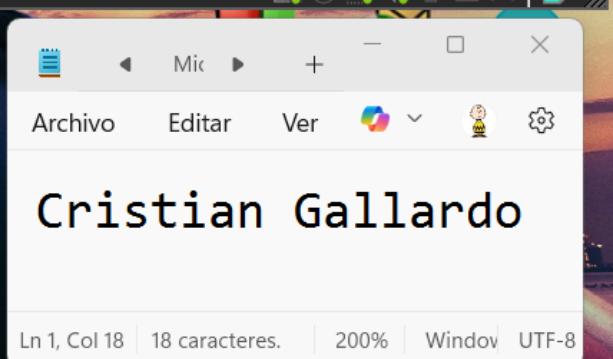
(volví a hacer auxi)



```
root@ubuntu:/tmp# mkdir original | cd original
-bash: cd: original: No such file or directory
root@ubuntu:/tmp#
root@ubuntu:~# ls
original
root@ubuntu:~# cd original
root@ubuntu:/tmp/original# echo documento en texto > hola.txt
root@ubuntu:/tmp/original# echo hola mundo > adios.txt
root@ubuntu:/tmp/original# rm adios.txt
root@ubuntu:/tmp/original# rsync -avvb --backup-dir=/tmp/backup1 --delete /tmp/original /tmp/copia
backup_dir is /tmp/backup1/
sending incremental file list
created directory /tmp/copia
delta-transmission disabled for local transfer or --whole-file
original/
original/hola.txt
total: matches=0 hash_hits=0 false_alarms=0 data=19

sent 129 bytes received 35 bytes 328.00 bytes/sec
total size is 19 speedup is 0.12
root@ubuntu:/tmp/original# cd ..
root@ubuntu:/tmp# find original copia backup1
original
original/hola.txt
copia
copia/original
copia/original/hola.txt
find: 'backup1': No such file or directory
root@ubuntu:/tmp# ls
copia original
root@ubuntu:/tmp# _
```

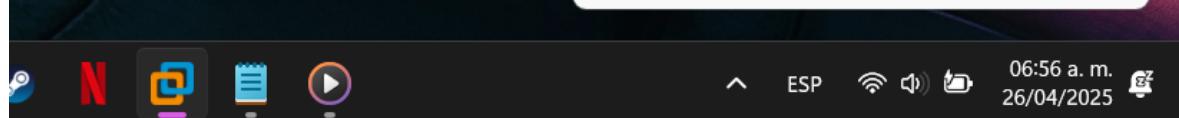
To direct input to this VM, click inside or press Ctrl+G.



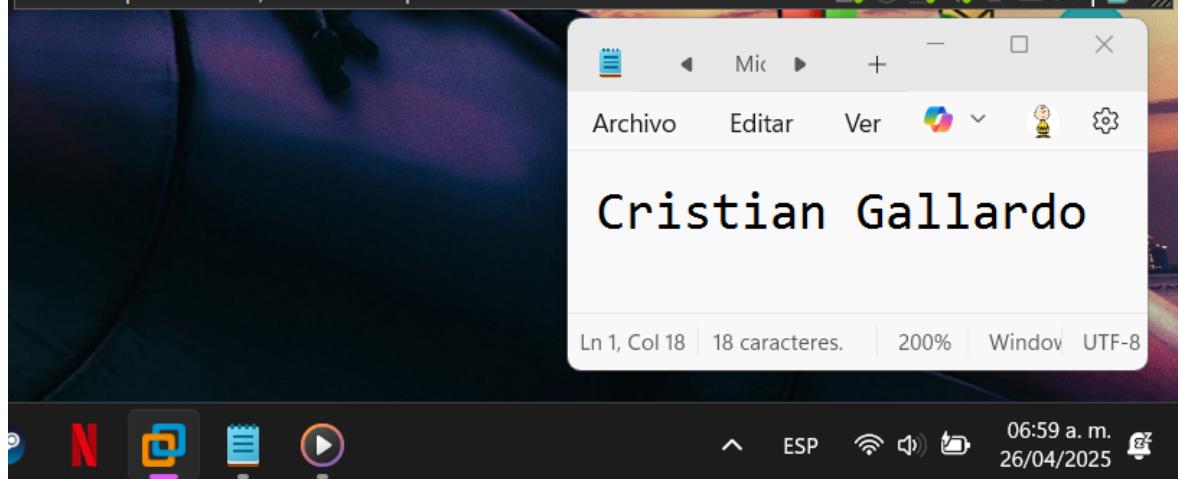
Archivo Editar Ver

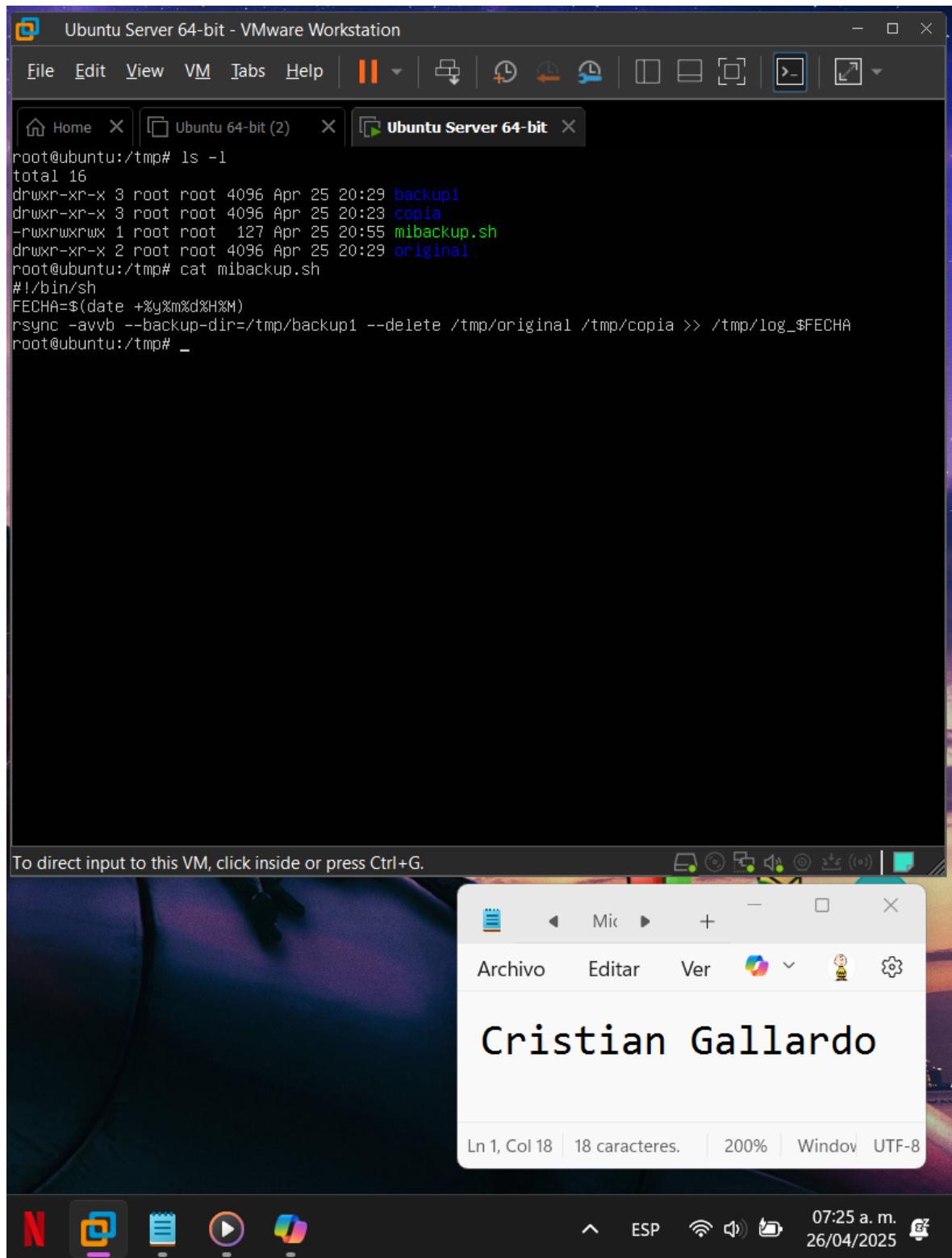
Cristian Gallardo

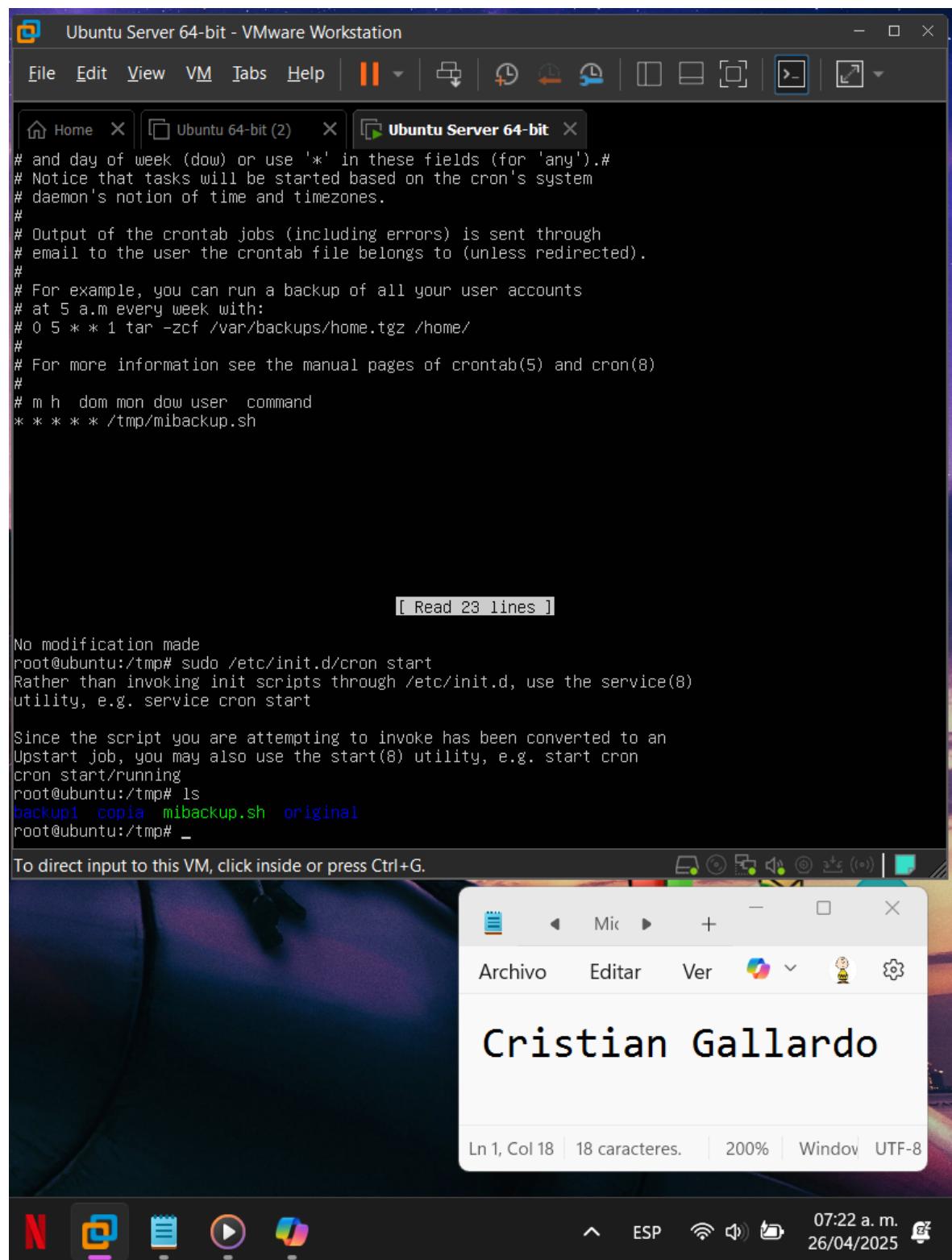
Ln 1, Col 18 | 18 caracteres. | 200% | Window | UTF-8



To direct input to this VM, click inside or press **Ctrl+G**.







Ubuntu Server 64-bit - VMware Workstation

File Edit View VM Tabs Help | || | | | | | | | | | | | | | | | | |

Home X Ubuntu 64-bit (2) X Ubuntu Server 64-bit X

```
* * * * * /tmp/mibackup.sh
root@ubuntu:/tmp# sudo /etc/init.d/cron start
Rather than invoking init scripts through /etc/init.d, use the service(8)
utility, e.g. service cron start

Since the script you are attempting to invoke has been converted to an
Upstart job, you may also use the start(8) utility, e.g. start cron
cron start/running
root@ubuntu:/tmp# ./mibackup.sh
root@ubuntu:/tmp# ls -l
total 20
drwxr-xr-x 3 root root 4096 Apr 25 20:29 backup1
drwxr-xr-x 3 root root 4096 Apr 25 20:23 copia
-rw-r--r-- 1 root root 580 Apr 25 20:56 log_2504252056
-rwxrwxrwx 1 root root 127 Apr 25 20:55 mibackup.sh
drwxr-xr-x 2 root root 4096 Apr 25 20:29 original
root@ubuntu:/tmp#
backup1 copia log_2504252056 log_2504252057 mibackup.sh original
root@ubuntu:/tmp# ls -l
total 64
drwxr-xr-x 3 root root 4096 Apr 25 20:29 backup1
drwxr-xr-x 3 root root 4096 Apr 25 20:23 copia
-rw-r--r-- 1 root root 580 Apr 25 20:56 log_2504252056
-rw-r--r-- 1 root root 290 Apr 25 20:57 log_2504252057
-rw-r--r-- 1 root root 290 Apr 25 20:58 log_2504252058
-rw-r--r-- 1 root root 290 Apr 25 20:59 log_2504252059
-rw-r--r-- 1 root root 290 Apr 25 21:00 log_2504252100
-rw-r--r-- 1 root root 290 Apr 25 21:01 log_2504252101
-rw-r--r-- 1 root root 290 Apr 25 21:02 log_2504252102
-rw-r--r-- 1 root root 290 Apr 25 21:03 log_2504252103
-rw-r--r-- 1 root root 290 Apr 25 21:04 log_2504252104
-rw-r--r-- 1 root root 290 Apr 25 21:05 log_2504252105
-rw-r--r-- 1 root root 290 Apr 25 21:06 log_2504252106
-rw-r--r-- 1 root root 290 Apr 25 21:07 log_2504252107
-rwxrwxrwx 1 root root 127 Apr 25 20:55 mibackup.sh
drwxr-xr-x 2 root root 4096 Apr 25 20:29 original
root@ubuntu:/tmp# _
```

To direct input to this VM, click inside or press Ctrl+G.

Micro Ver + Archivo Editar Ver

Cristian Gallardo

Ln 1, Col 18 | 18 caracteres. | 200% | Window | UTF-8

N ESP 07:39 a.m. 26/04/2025

EVALUACION

1.

Comando find que utilzo: find original copia backup1

A screenshot of a VMware Workstation interface. At the top, the title bar reads "Ubuntu Server 64-bit - VMware Workstation". Below it is a menu bar with "File", "Edit", "View", "VM", "Tabs", "Help". The main area shows a terminal window titled "Ubuntu Server 64-bit" with the following command history:

```
root@ubuntu:/tmp# echo SEGURIDAD > /tmp/original/nuevo25_seguridad.txt
root@ubuntu:/tmp# find original copia backup1
original
original/nuevo25_seguridad.txt
original/hola.txt
copia
copia/original
copia/original/hola.txt
backup1
backup1/original
backup1/original/adios.txt
root@ubuntu:/tmp#
```

Below the terminal, a message says "To direct input to this VM, click inside or press Ctrl+G.". In the bottom right corner, there is a small floating terminal window with a light blue background and white text, displaying the name "Cristian Gallardo". The status bar at the bottom shows "Ln 1, Col 18 | 18 caracteres. | 200% | Window | UTF-8". The bottom dock contains icons for "N", "VMware", "File", "Edit", "Copy", and "Paste". The system tray shows battery level, signal strength, and the date/time "08:14 a.m. 26/04/2025".

Que archivos están inicialmente en original, copia, backup1

2.

```
Ubuntu Server 64-bit - VMware Workstation
File Edit View VM Tabs Help ||| Home X | Ubuntu 64-bit (2) X | Ubuntu Server 64-bit X
copia
copia/original
copia/original/hola.txt
backup1
backup1/original
backup1/original/adios.txt
root@ubuntu:/tmp# sudo /etc/init.d/cron start
Rather than invoking init scripts through /etc/init.d, use the service(8)
utility, e.g. service cron start

Since the script you are attempting to invoke has been converted to an
Upstart job, you may also use the start(8) utility, e.g. start cron
cron start/running, process 3452
root@ubuntu:/tmp# ls
backup1 copia mibackup.sh original
root@ubuntu:/tmp# ls -l
total 32
drwxr-xr-x 3 root root 4096 Apr 25 20:29 backup1
drwxr-xr-x 3 root root 4096 Apr 25 20:23 copia
-rw-r--r-- 1 root root 333 Apr 25 21:59 log_2504252159
-rw-r--r-- 1 root root 334 Apr 25 22:00 log_2504252200
-rw-r--r-- 1 root root 334 Apr 25 22:01 log_2504252201
-rw-r--r-- 1 root root 384 Apr 25 22:02 log_2504252202
-rwxrwxrwx 1 root root 127 Apr 25 20:55 mibackup.sh
drwxr-xr-x 2 root root 4096 Apr 25 21:17 original
root@ubuntu:/tmp# find original copia backup1
original
original/nuevo25_seguridad.txt
original/hola.txt
copia
copia/original
copia/original/nuevo25_seguridad.txt
copia/original/hola.txt
backup1
backup1/original
backup1/original/adios.txt
root@ubuntu:/tmp#
To direct input to this VM, click inside or press Ctrl+G.
```

Archivo Editar Ver

Cristian Gallardo

Ln 1, Col 18 | 18 caracteres. | 200% | Window | UTF-8

N ENG US 08:35 a.m.
26/04/2025

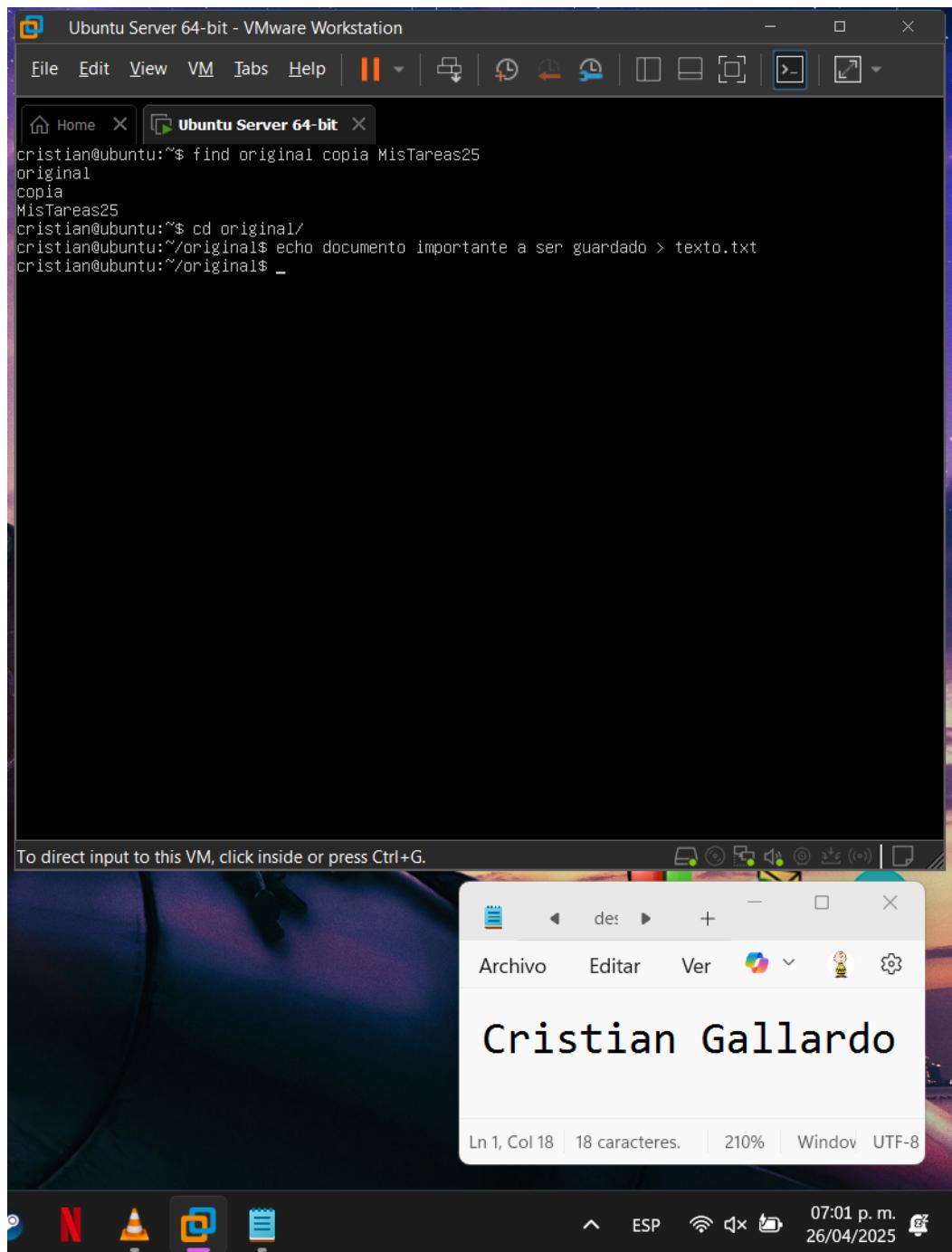
Se hizo la copia del archivo nuevo25_seguridad.txt en el directorio /tmp/copia/original

3.

Pasado el minuto, la carpeta /tmp/copia se actualizo e igualmente que en la carpeta original borro nuevo25_seguridad mientras que la carpeta de backup1 guarda el archivo borrado

4.

Creamos el directorio y el archivo a ser guardado



Creamos el script

The screenshot shows a VMware Workstation interface with a running Ubuntu Server 64-bit virtual machine. The terminal window displays the contents of a backup script named `backup.sh`. The script uses `rsync` to synchronize files from the source directory to the destination directory, including a log file named `log_$(date +'%Y-%m-%d %H:%M')`.

```
cristian@ubuntu:~$ cat backup.sh
#!/bin/sh
FECHA=$(date +'%Y-%m-%d %H:%M')
rsync -avvb --backup-dir=/home/cristian/MisTareas25 --delete /home/cristian/original/ /home/cristian/copia/ >> /home/cristian/log_$FECHA
cristian@ubuntu:~$ _
```

To direct input to this VM, click inside or press Ctrl+G.

In the foreground, a LibreOffice Writer document titled "Cristian Gallardo" is open. The status bar at the bottom of the document window shows "Ln 1, Col 18 | 18 caracteres. | 210% | Window | UTF-8". The system tray at the bottom of the screen includes icons for network, battery, volume, and date/time (07:29 p.m., 26/04/2025).

Configuramos cron -e e iniciamos el proceso de cron

```
# and day of week (dow) or use '*' in these fields (for 'any').#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# minuto hora dia-mes mes dia-semana command
  30    19      *      *      6      /home/cristian/backup.sh

[ Read 23 lines ]

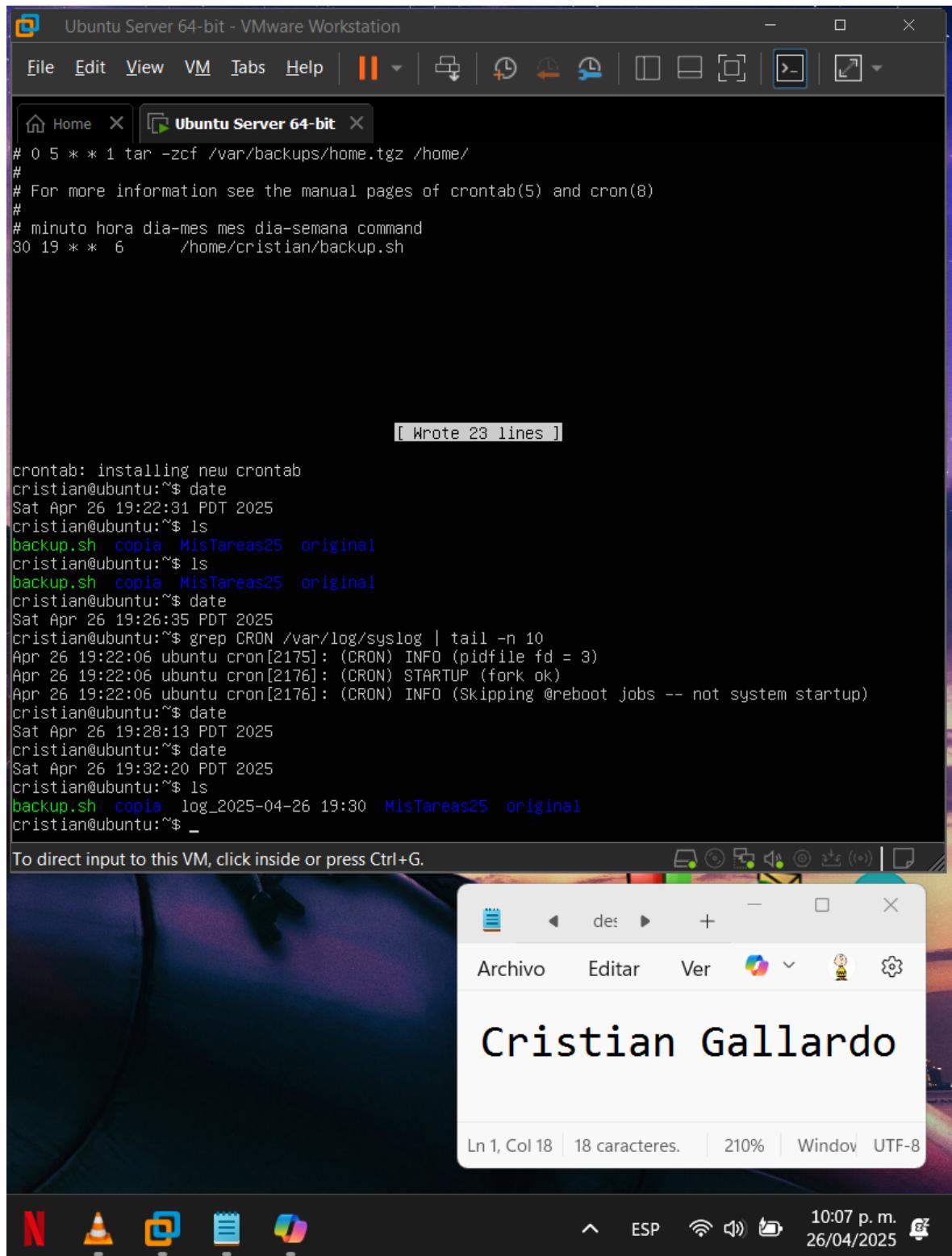
No modification made
cristian@ubuntu:~$ sudo /etc/init.d/cron start
[sudo] password for cristian:
Rather than invoking init scripts through /etc/init.d, use the service(8)
utility, e.g. service cron start

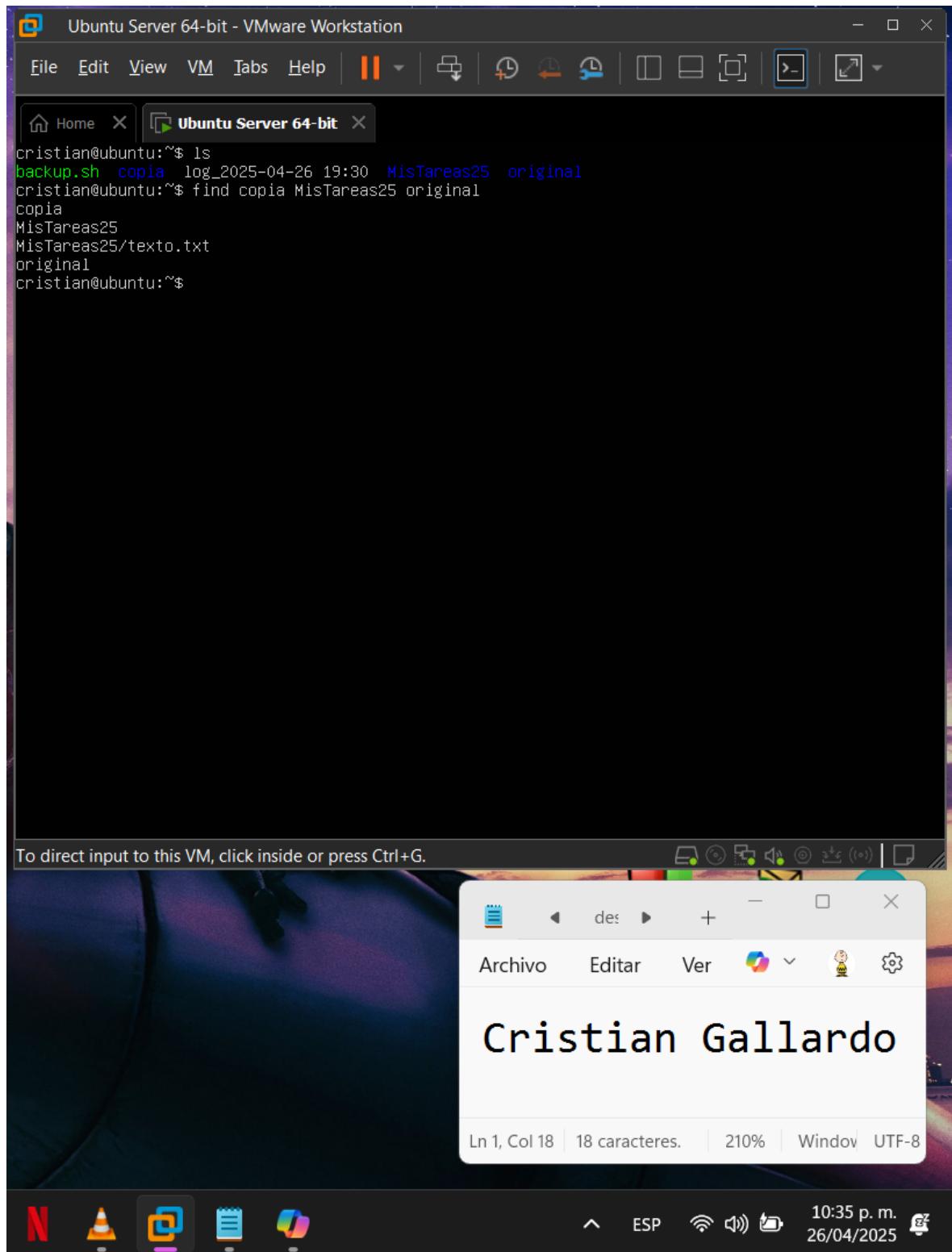
Since the script you are attempting to invoke has been converted to an
Upstart job, you may also use the start(8) utility, e.g. start cron
cristian@ubuntu:~$ sudo service cron status
cron start/running, process 1375
cristian@ubuntu:~$ _
```

To direct input to this VM, click inside or press Ctrl+G.

The slide contains the text "Cristian Gallardo". The status bar at the bottom right shows "Ln 1, Col 18 | 18 caracteres. | 210% | Window | UTF-8".

The taskbar includes icons for a red square, a traffic cone, a blue square, a document, a colorful icon, and a gear. System status icons show battery level, signal strength, and the date/time "07:29 p.m. 26/04/2025".





5.

Primero creamos la carpeta **TusTareas25**, borramos el log del ejercicio anterior y creamos un texto de ejemplo

```
cristian@ubuntu:~$ mkdir TusTareas25
cristian@ubuntu:~$ rm log_2025-04-26\ 19\:30
cristian@ubuntu:~$ echo Ejercicio4 > ./original/otroTexto.txt
cristian@ubuntu:~$
```

To direct input to this VM, click inside or press Ctrl+G.

Cristian Gallardo

Ln 1, Col 18 | 18 caracteres. | 210% | Window UTF-8

10:39 p. m. 26/04/2025

Modificamos en backup.sh

Ubuntu Server 64-bit - VMware Workstation

[Wrote 3 lines]

```
cristian@ubuntu:~$ cat backup.sh
#!/bin/sh
FECHA=$(date +'%Y-%m-%d %H:%M')
rsync -avvb --backup-dir=/home/cristian/TusTareas25 --delete /home/cristian/original/ /home/cristian/copia/ >> /home/cristian/log_$FECHA
cristian@ubuntu:~$
```

To direct input to this VM, click inside or press Ctrl+G.

des +

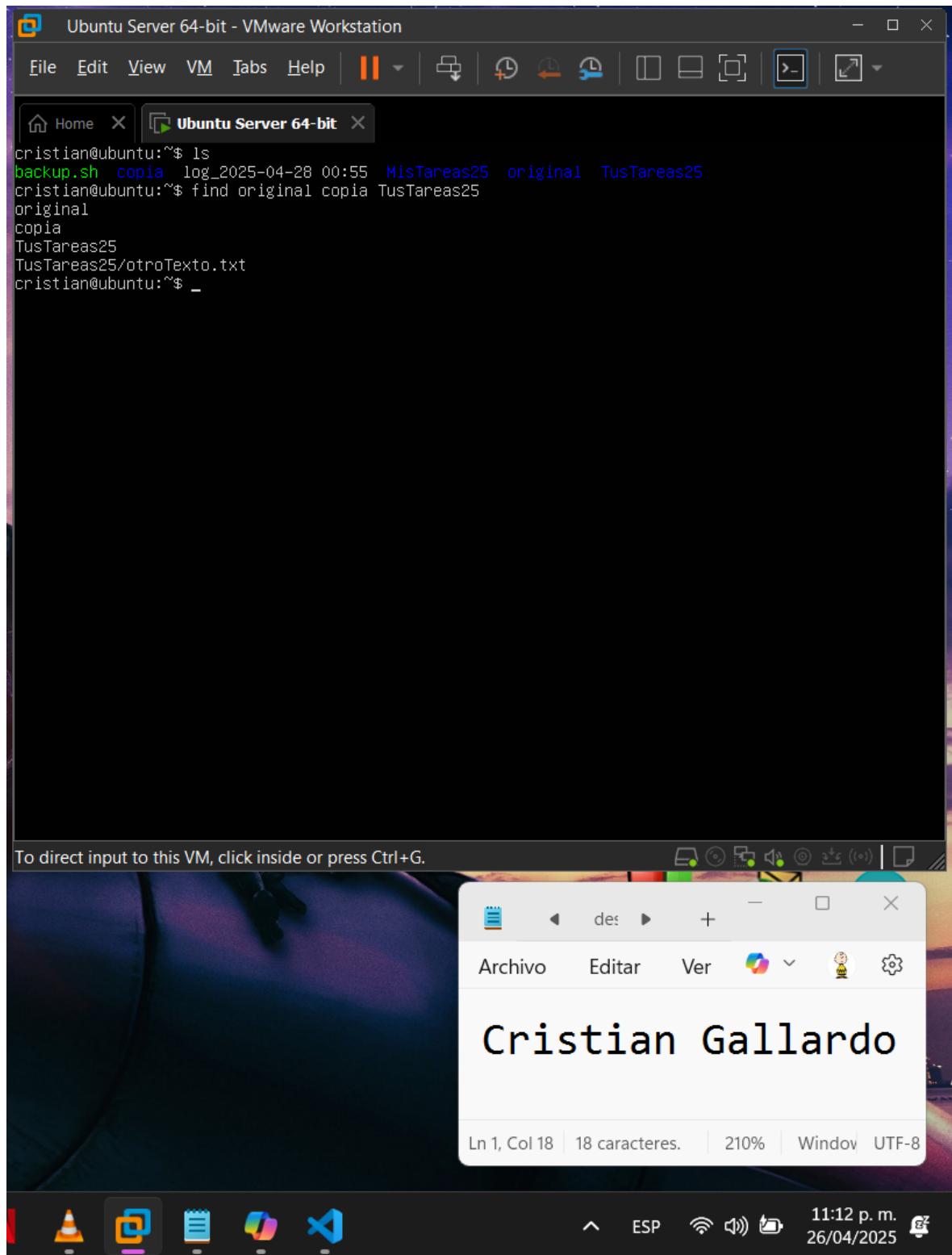
Archivo Editar Ver

Cristian Gallardo

Ln 1, Col 18 | 18 caracteres. | 210% | Window | UTF-8

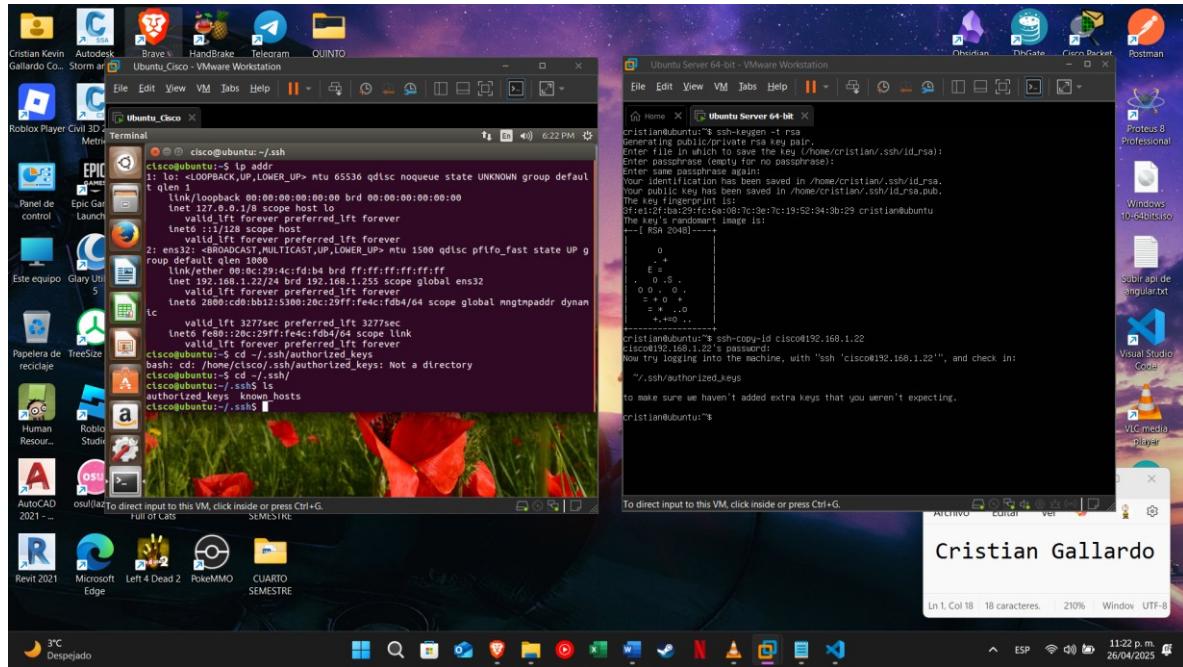
N ESP 10:43 p.m. 26/04/2025

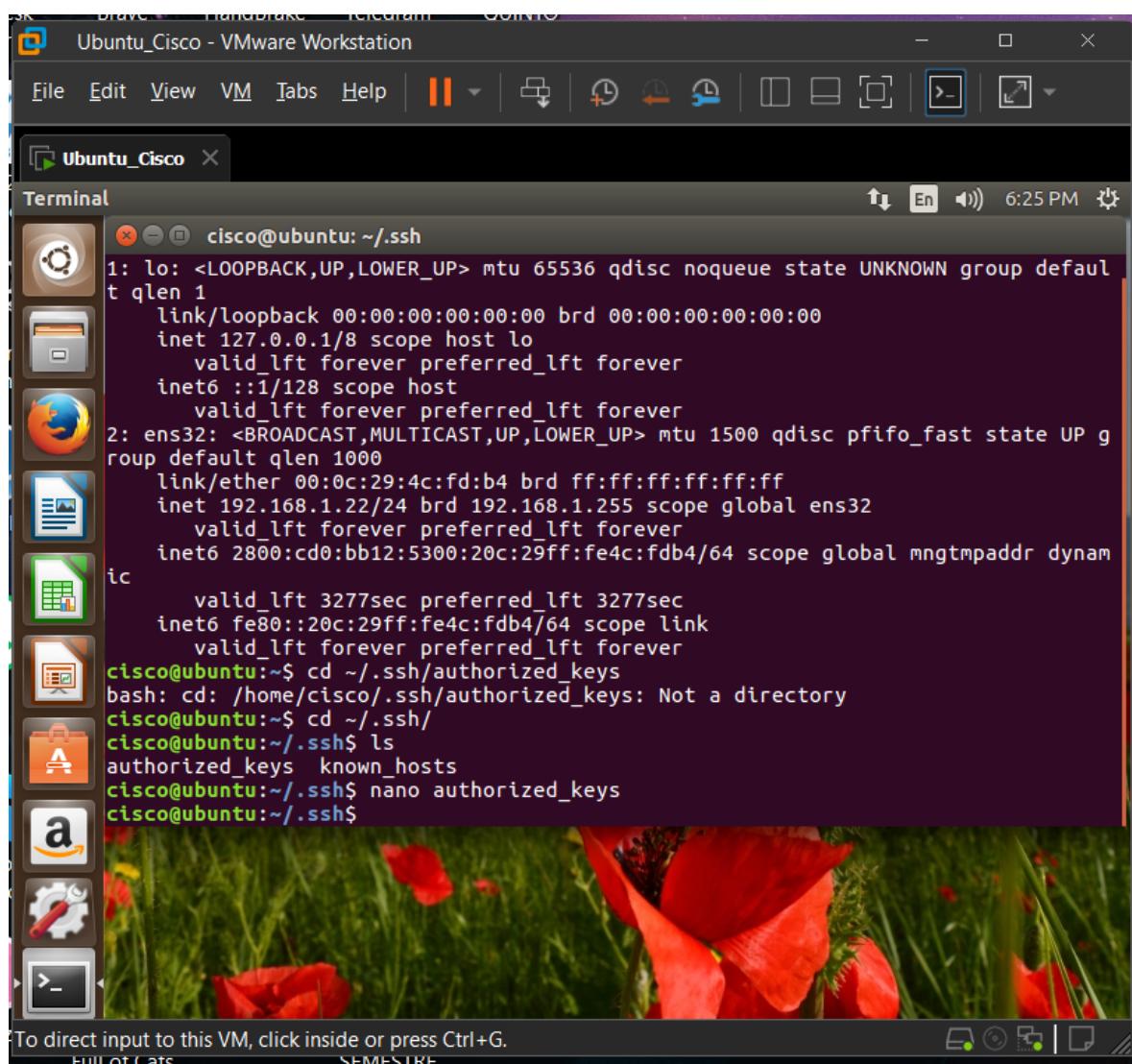
Modificamos el archivo crontab -e, borramos el archivo de prueba y modificamos la fecha para poder verificar

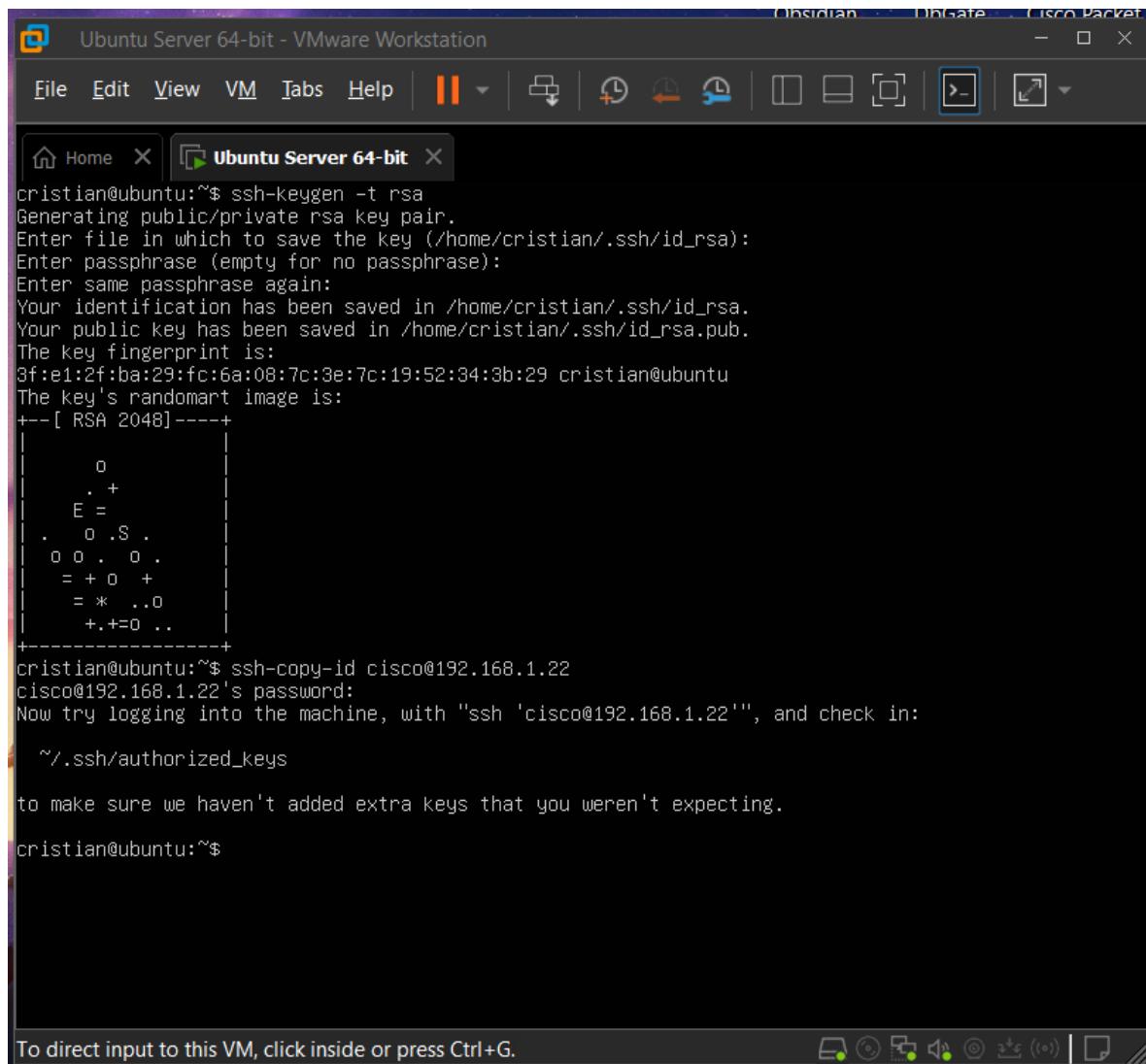


6.

Primero configuramos el acceso a ssh sin contraseña, generando una llave







Modificamos el backup.sh

```
#!/bin/sh
FECHA=$(date +'%Y-%m-%d_%H-%M')
rsync -avzb \
-e ssh \
--delete \
--backup-dir="/home/cisco/Desktop/copia/backups" \
/home/cristian/original \
cisco@192.168.1.22:/home/cisco/Desktop/copia/ > /home/cristian/log_$FECHA
```

To direct input to this VM, click inside or press Ctrl+G.

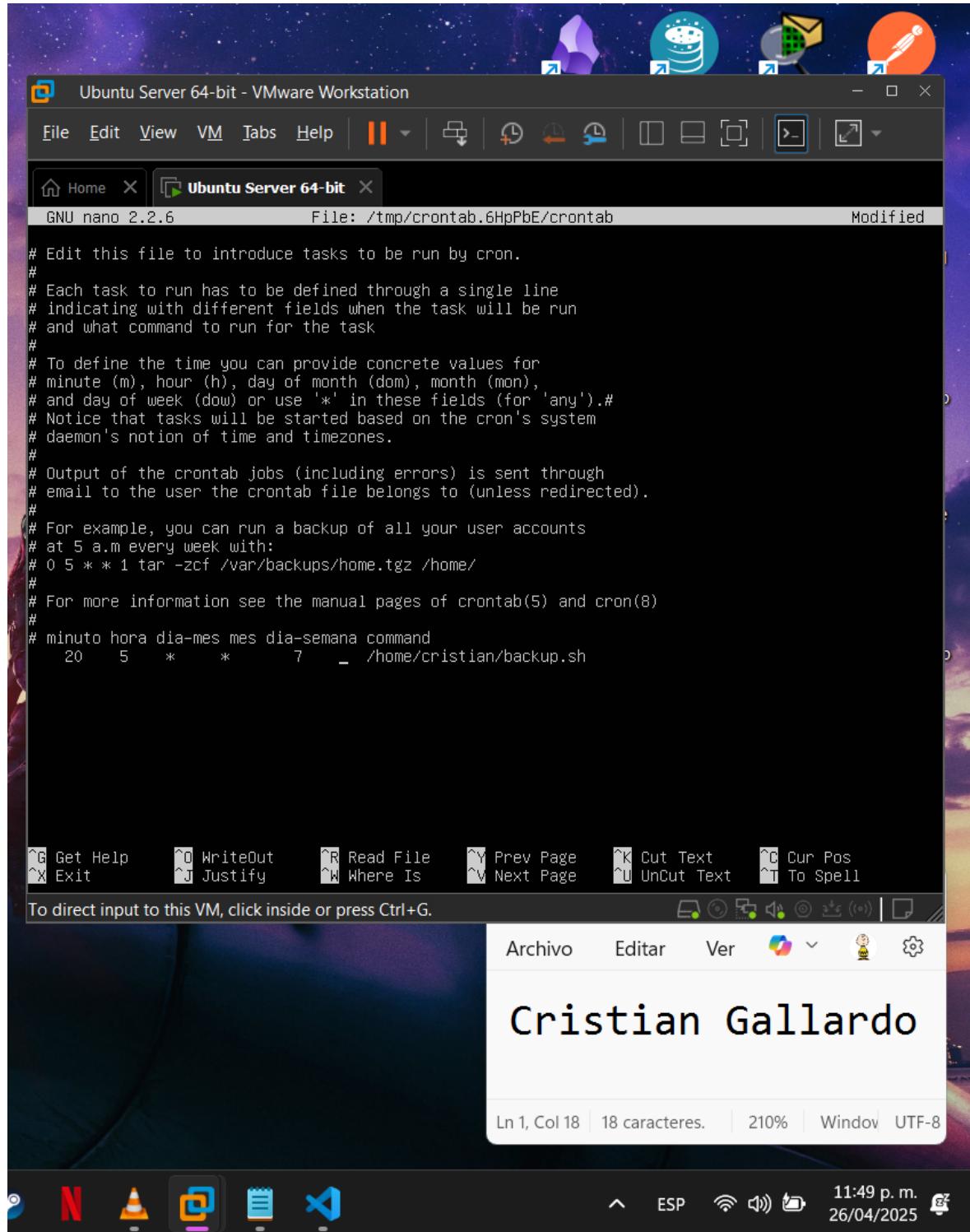
Archivo Editar Ver

Cristian Gallardo

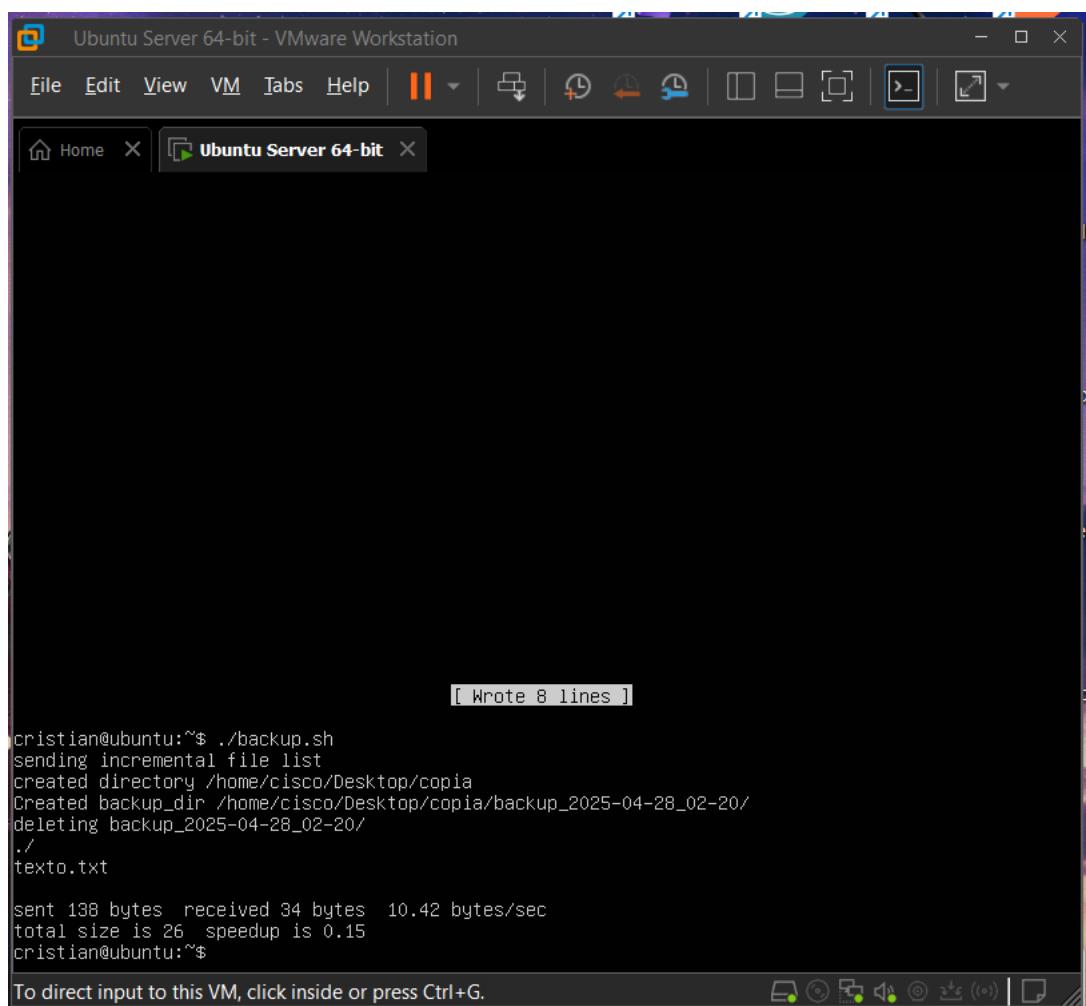
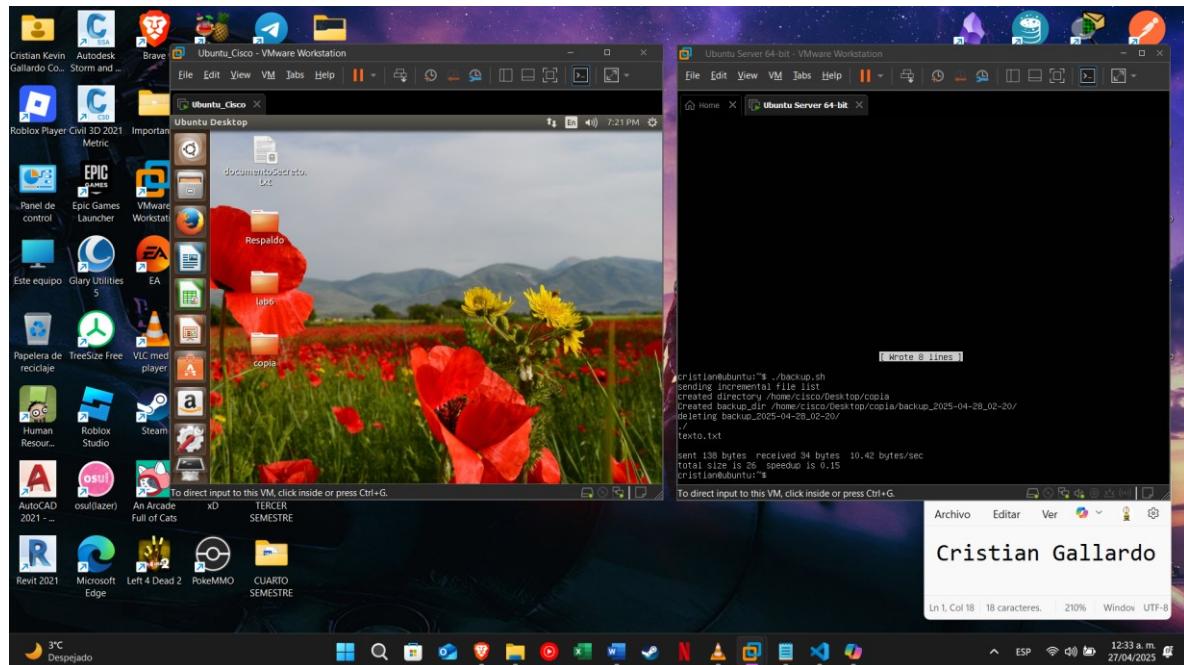
Ln 1, Col 18 | 18 caracteres. | 210% | Window | UTF-8

N 12:47 a.m. 27/04/2025

Modificamos cron -e



Probar el script



Cambiar la fecha, hacer correr cron y hacer la prueba

