

CPD_Practica_9.

Almacenamiento(II)

1. Copias de seguridad con Duplicity

- Hacer una copia de seguridad de la carpeta test9

Actividades | Terminal

vagrant@nodo1: ~

Archivo Editar Ver Buscar Terminal Ayuda

```
nodo2: your host and reload your VM.
nodo2:
nodo2: Guest Additions Version: 6.1.10
nodo2: VirtualBox Version: 5.2
==> nodo2: Setting hostname...
==> nodo2: Configuring and enabling network interfaces...
==> nodo2: Mounting shared folders...
nodo2: /vagrant => /home/ignacio/CPD/p8
==> nodo2: Machine already provisioned. Run `vagrant provision` or use
the `--provision`
==> nodo2: Run `vagrant provision` to force provisioning. Provisioners marked to run alwa
ys will still run.
ignacio@ignacio-XS50EA:~/CPD/p8$ sudo vagrant ssh nodo1
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-54-generic x86_64)

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

System information disabled due to load higher than 1.0

 * Introducing self-healing high availability clusters in MicroK8s.
   Simple, hardened, Kubernetes for production, from RaspberryPi to DC

https://microk8s.io/high-availability

13 updates can be installed immediately.
8 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Wed Dec  2 10:41:17 2020 from 192.168.12.12
vagrant@nodo1:~$ ls -l ./backups/
-rw-r--r-- 1 vagrant vagrant 102400 Dec  2 10:41 20201203T172745Z.sigtar.gpg  duplicity-full.
20201203T172745Z.vol1.difftar.gpg
-rw-r--r-- 1 vagrant vagrant 102400 Dec  2 10:41 20201203T172745Z.manifest.gpg
vagrant@nodo1:~$
```

vagrant@nodo2: ~

Archivo Editar Ver Buscar Terminal Ayuda

```
10 updates can be installed immediately.
8 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Wed Dec  2 12:02:04 2020 from 10.0.2.2
vagrant@nodo2:~$ ssh-keygen -p -m PEM -f ~/.ssh/id_rsa
Key has comment 'vagrant@nodo2'
Enter new passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved with the new passphrase.
vagrant@nodo2:~$ duplicity --test9 scp://vagrant@nodo1:/home/vagrant/b
ackups
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: none
GnuPG passphrase for decryption:
Retype passphrase for decryption to confirm:
No signatures found, switching to full backup.
-----[ Backup Statistics ]-----
StartTime 1607016486.68 (Thu Dec  3 17:28:06 2020)
EndTime 1607016486.79 (Thu Dec  3 17:28:06 2020)
ElapsedTime 0.12 (0.12 seconds)
SourceFiles 1
SourceFileSize 4096 (4.00 KB)
NewFiles 1
NewFileSize 4096 (4.00 KB)
DeletedFiles 0
ChangedFiles 0
ChangedFileSize 0 (0 bytes)
ChangedDeltaSize 0 (0 bytes)
DeltaEntries 1
RawDeltaSize 0 (0 bytes)
TotalDestinationSizeChange 187 (187 bytes)
Errors 0
-----
vagrant@nodo2:~$
```

- Añadir algunos fichero más y modificar alguno de ellos.

```

vagrant@node02:~$ touch ./test9/fichero2
vagrant@node02:~$ ls ./test9/
fichero1 fichero2
vagrant@node02:~$ duplicity ./test9 scp://vagrant@node01/home/vagrant/b
ackups
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec 3 17:27:45 2020
GnuPG passphrase for decryption:
Retype passphrase for decryption to confirm:
----- [ Backup Statistics ] -----
StartTime 1607017274.99 (Thu Dec 3 17:41:14 2020)
EndTime 1607017275.03 (Thu Dec 3 17:41:15 2020)
ElapsedTime 0.04 (0.04 seconds)
SourceFiles 3
SourceFileSize 4096 (4.00 KB)
NewFiles 3
NewFileSize 4096 (4.00 KB)
DeletedFiles 0
ChangedFiles 0
ChangedFileSize 0 (0 bytes)
ChangedDeltaSize 0 (0 bytes)
DeltaEntries 3
RawDeltaSize 0 (0 bytes)
TotalDestinationSizeChange 238 (238 bytes)
Errors 0
-----
vagrant@node02:~$

```

```
vagrant@node2: ~  
Archivo Editar Ver Buscar Terminal Ayuda  
MODIFICAD0000000000000000000000000000000000000000
```

- Hacer una nueva copia de seguridad de la carpeta test9.

```
Activados  Terminal
jue 14:42

vagrant@nodo1:~
Archivo  Editor  Ver  Buscar  Terminal  Ayuda

* Introducing self-healing high availability clusters in MicroK8s.
Simple, hardened, Kubernetes for production, from RaspberryPi to DC

https://microk8s.io/high-availability

13 updates can be installed immediately.
8 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Wed Dec  2 10:41:17 2020 from 192.168.12.12
vagrant@nodo1:~$ ls ./backups/
duplicity-full-signatures.20201203T172745Z.sigtar.gpg  duplicity-full.
20201203T172745Z.vol1.difftar.gpg
duplicity-full.20201203T172745Z.manifest.gpg
vagrant@nodo1:~$ ls ./backups/
duplicity-full-signatures.20201203T172745Z.sigtar.gpg
duplicity-full.20201203T172745Z.manifest.gpg
duplicity-full.20201203T172745Z.vol1.difftar.gpg
duplicity-inc.20201203T172745Z.to.20201203T174104Z.manifest.gpg
duplicity-inc.20201203T172745Z.to.20201203T174104Z.vol1.difftar.gpg
duplicity-new-signatures.20201203T172745Z.to.20201203T174104Z.sigtar.g
pg
vagrant@nodo1:~$ ls ./backups/
duplicity-full-signatures.20201203T172745Z.sigtar.gpg
duplicity-full.20201203T172745Z.manifest.gpg
duplicity-full.20201203T172745Z.vol1.difftar.gpg
duplicity-inc.20201203T172745Z.to.20201203T174104Z.manifest.gpg
duplicity-inc.20201203T172745Z.to.20201203T174104Z.vol1.difftar.gpg
duplicity-inc.20201203T174104Z.to.20201203T174219Z.manifest.gpg
duplicity-inc.20201203T174104Z.to.20201203T174219Z.vol1.difftar.gpg
duplicity-new-signatures.20201203T172745Z.to.20201203T174104Z.sigtar.g
pg
duplicity-new-signatures.20201203T174104Z.to.20201203T174219Z.sigtar.g
pg
vagrant@nodo1:~$

vagrant@nodo2:~
Archivo  Editor  Ver  Buscar  Terminal  Ayuda

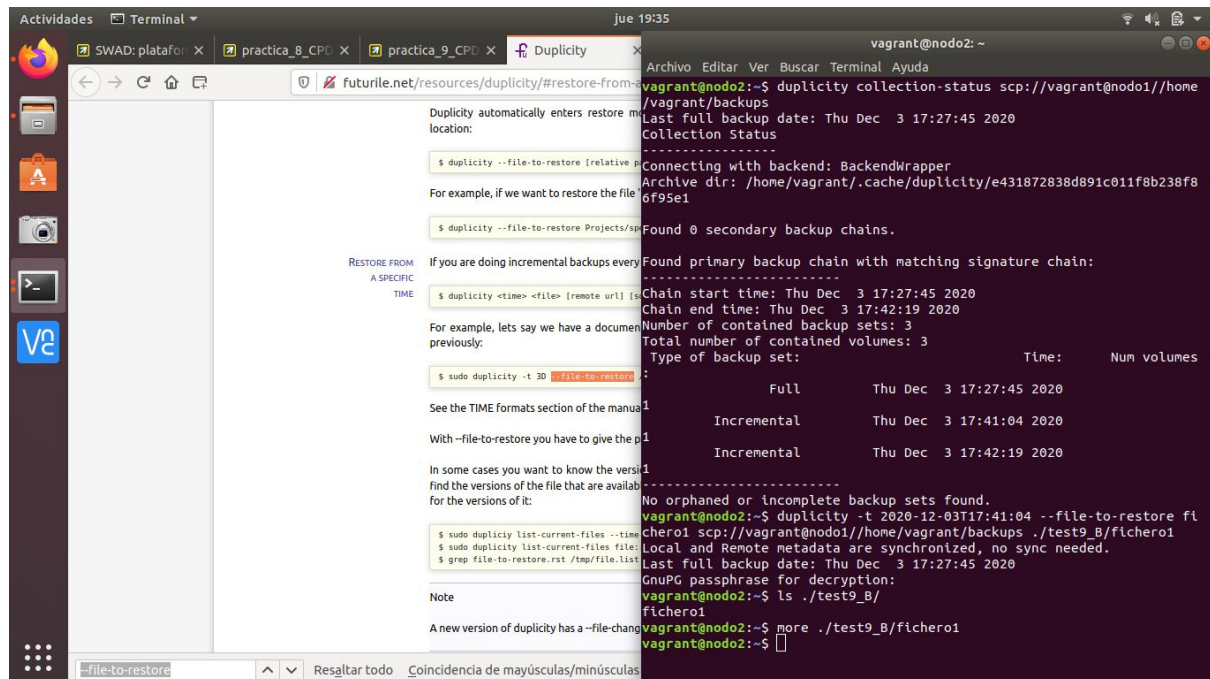
NewFiles 3
NewFileSize 4096 (4.00 KB)
DeletedFiles 0
ChangedFiles 0
ChangedFileSize 0 (0 bytes)
ChangedDeltaSize 0 (0 bytes)
DeltaEntries 3
RawDeltaSize 0 (0 bytes)
TotalDestinationSizeChange 238 (238 bytes)
Errors 0
-----
vagrant@nodo2:~$ vi ./test9/fichero1
vagrant@nodo2:~$ duplicity . /test9 scp://vagrant@nodo1//home/vagrant/b
ackups
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec  3 17:27:45 2020
GnuPG passphrase for decryption:
Retype passphrase for decryption to confirm:
----- [ Backup Statistics ] -----
StartTime 1607017345.88 (Thu Dec  3 17:42:25 2020)
EndTime 1607017345.91 (Thu Dec  3 17:42:25 2020)
ElapsedTime 0.03 (0.03 seconds)
SourceFiles 3
SourceFileSize 4135 (4.04 KB)
NewFiles 1
NewFileSize 4096 (4.00 KB)
DeletedFiles 0
ChangedFiles 1
ChangedFileSize 39 (39 bytes)
ChangedDeltaSize 0 (0 bytes)
DeltaEntries 2
RawDeltaSize 46 (46 bytes)
TotalDestinationSizeChange 254 (254 bytes)
Errors 0
-----
vagrant@nodo2:~$
```

- Recuperar en la carpeta test9_A sólo el fichero que hemos modificado. Así podemos comprobar como fácilmente podemos recuperar un fichero.

[illegible]

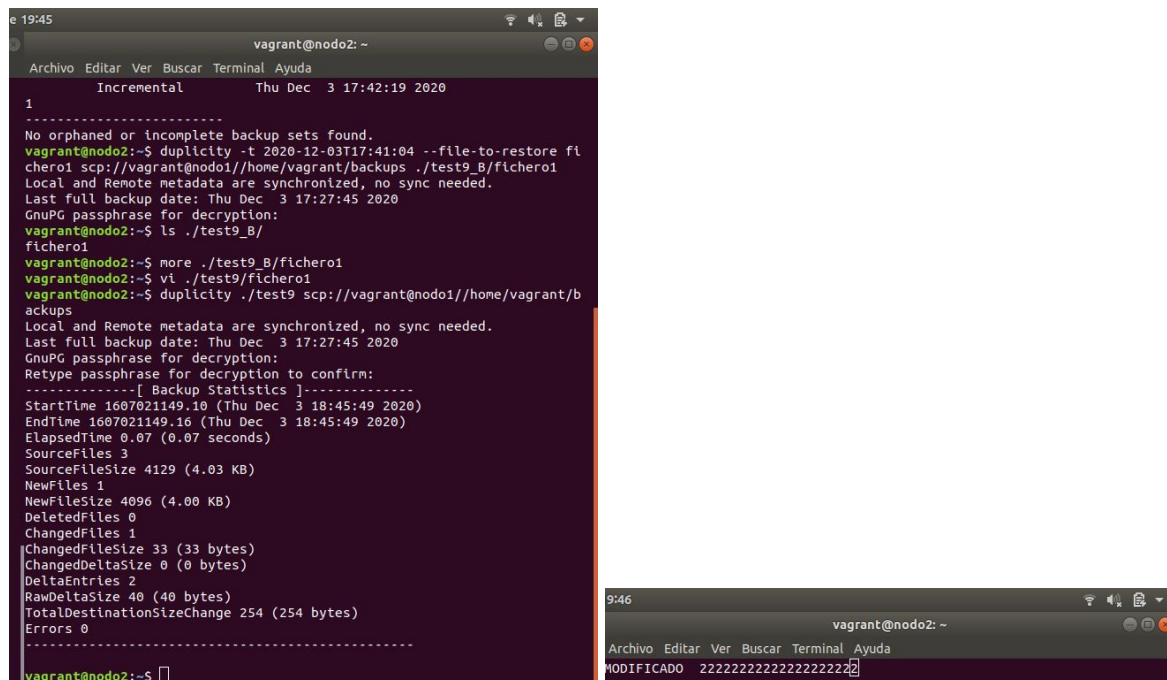
- Recuperar en la carpeta test9_B la primera versión del fichero que hemos modificado utilizando la fecha y hora.

En el more no muestra nada por que en la primera copia se envió vacío



```
vagrant@nodo2:~$ duplicity collection-status scp://vagrant@nodo1//home/vagrant/backups
Last full backup date: Thu Dec 3 17:27:45 2020
Collection Status
-----
Connecting with backend: BackendWrapper
Archive dir: /home/vagrant/.cache/duplicity/e431872838d891c011f8b238f86f95e1
Found 0 secondary backup chains.
Found primary backup chain with matching signature chain:
-----
Chain start time: Thu Dec 3 17:27:45 2020
Chain end time: Thu Dec 3 17:42:19 2020
Number of contained backup sets: 3
Total number of contained volumes: 3
Type of backup set:                               Time:          Num volumes
-----
1 Full Thu Dec 3 17:27:45 2020
1 Incremental Thu Dec 3 17:41:04 2020
1 Incremental Thu Dec 3 17:42:19 2020
-----
No orphaned or incomplete backup sets found.
vagrant@nodo2:~$ duplicity -t 2020-12-03T17:41:04 --file-to-restore fichero1 scp://vagrant@nodo1//home/vagrant/backups ./test9_B/fichero1
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec 3 17:27:45 2020
GnuPG passphrase for decryption:
vagrant@nodo2:~$ ls ./test9_B/
fichero1
vagrant@nodo2:~$ more ./test9_B/fichero1
vagrant@nodo2:~$
```

-Hacer 3 copias incrementales, con modificaciones de 1 fichero.-Borrar las copias incrementales y quedarse sólo con 1. (remove-all-inc-of-but-n-full)



```
vagrant@nodo2:~$ duplicity collection-status scp://vagrant@nodo1//home/vagrant/backups
Last full backup date: Thu Dec 3 17:27:45 2020
Collection Status
-----
Connecting with backend: BackendWrapper
Archive dir: /home/vagrant/.cache/duplicity/e431872838d891c011f8b238f86f95e1
Found 0 secondary backup chains.
Found primary backup chain with matching signature chain:
-----
Chain start time: Thu Dec 3 17:27:45 2020
Chain end time: Thu Dec 3 17:42:19 2020
Number of contained backup sets: 3
Total number of contained volumes: 3
Type of backup set:                               Time:          Num volumes
-----
1 Full Thu Dec 3 17:27:45 2020
1 Incremental Thu Dec 3 17:41:04 2020
1 Incremental Thu Dec 3 17:42:19 2020
-----
No orphaned or incomplete backup sets found.
vagrant@nodo2:~$ duplicity -t 2020-12-03T17:41:04 --file-to-restore fichero1 scp://vagrant@nodo1//home/vagrant/backups ./test9_B/fichero1
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec 3 17:27:45 2020
GnuPG passphrase for decryption:
vagrant@nodo2:~$ ls ./test9_B/
fichero1
vagrant@nodo2:~$ more ./test9_B/fichero1
vagrant@nodo2:~$ vi ./test9/fichero1
vagrant@nodo2:~$ duplicity ./test9 scp://vagrant@nodo1//home/vagrant/backups
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec 3 17:27:45 2020
GnuPG passphrase for decryption:
Retype passphrase for decryption to confirm:
-----[ Backup Statistics ]-----
StartTime 1607021149.10 (Thu Dec 3 18:45:49 2020)
EndTime 1607021149.16 (Thu Dec 3 18:45:49 2020)
ElapsedTime 0.07 (0.07 seconds)
SourceFiles 3
SourceFileSize 4129 (4.03 KB)
NewFiles 1
NewFileSize 4096 (4.00 KB)
DeletedFiles 0
ChangedFiles 1
ChangedFileSize 33 (33 bytes)
ChangedDeltaSize 0 (0 bytes)
DeltaEntries 2
RawDeltaSize 40 (40 bytes)
TotalDestinationSizeChange 254 (254 bytes)
Errors 0
-----
vagrant@nodo2:~$
```



```
19:50 vagrant@nodo2: ~  
Archivo Editar Ver Buscar Terminal Ayuda  
NewFiles 1  
NewFileSize 4096 (4.00 KB)  
DeletedFiles 0  
ChangedFiles 1  
ChangedFileSize 33 (33 bytes)  
ChangedDeltaSize 0 (0 bytes)  
DeltaEntries 2  
RawDeltaSize 40 (40 bytes)  
TotalDestinationSizeChange 254 (254 bytes)  
Errors 0  
-----  
vagrant@nodo2:~$ vi ./test9/fichero1  
vagrant@nodo2:~$ duplicity ./test9 scp://vagrant@nodo1//home/vagrant/b  
ackups  
Local and Remote metadata are synchronized, no sync needed.  
Last full backup date: Thu Dec 3 17:27:45 2020  
GnuPG passphrase for decryption:  
Retype passphrase for decryption to confirm:  
-----[ Backup Statistics ]-----  
StartTime 1607021441.85 (Thu Dec 3 18:50:41 2020)  
EndTime 1607021441.89 (Thu Dec 3 18:50:41 2020)  
ElapsedTime 0.04 (0.04 seconds)  
SourceFiles 3  
SourceFileSize 4126 (4.03 KB)  
NewFiles 1  
NewFileSize 4096 (4.00 KB)  
DeletedFiles 0  
ChangedFiles 1  
ChangedFileSize 30 (30 bytes)  
ChangedDeltaSize 0 (0 bytes)  
DeltaEntries 2  
RawDeltaSize 37 (37 bytes)  
TotalDestinationSizeChange 255 (255 bytes)  
Errors 0  
-----  
vagrant@nodo2:~$
```

Tenemos por tanto:
modificación 1 que contiene “MODIFICADOOOOOO”
modificacion 2 que contiene “MODIFICADO 22222”
modificacion 3 que contiene “MODIFICADO 333333”

```
20:04 vagrant@nodo2: ~  
Archivo Editor Ver Buscar Terminal Ayuda  
vagrant@nodo2:~$ duplicity remove-all-inc-of-but-n-full 1 scp://vagrant  
@nodo1//home/vagrant/backups/  
Local and Remote metadata are synchronized, no sync needed.  
Last full backup date: Thu Dec 3 17:27:45 2020  
No old backup sets found, nothing deleted.
```

-Comprobar la lista de ficheros

Por algún motivo no me ha funcionado el comando y no lo he conseguido solucionar.

The screenshot shows a Linux desktop with a terminal window and a web browser. The terminal window displays the output of the 'duplidy' command, showing backup collection status and removal of old backups. The web browser shows the 'duplidy' website.

Terminal Output:

```
vagrant@node2:~$ duplidy remove-all-inc-of-but-n-full 1 scp://vagrant@node1/home/vagrant/backups/
Local and Remote metadata are synchronized, no sync needed.
Last full backup date: Thu Dec 3 17:27:45 2020
No old backup sets found, nothing deleted.
vagrant@node2:~$ duplidy collection-status scp://vagrant@node1/home/vagrant/backups
Last full backup date: Thu Dec 3 17:27:45 2020
Collection Status
-----
Connecting with backend: Backendwrapper
Archive dir: /home/vagrant/.cache/duplidy/e431872838d891c011f8b238f6f95e1
Found 0 secondary backup chains.

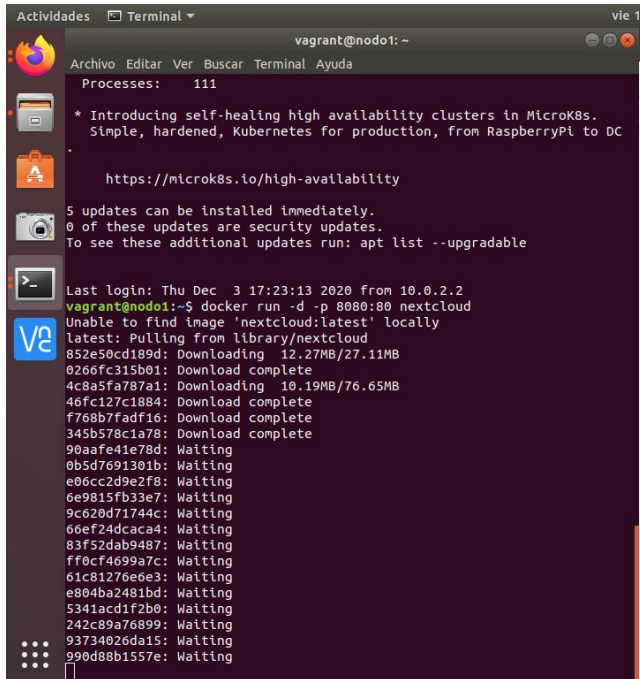
Found primary backup chain with matching signature chain:
-----
Chain start time: Thu Dec 3 17:27:45 2020
Chain end time: Thu Dec 3 18:46:31 2020
Number of contained backup sets: 5
Total number of contained volumes: 5
Type of backup set:                                     Time:          Num volumes
-----
1 Full                                                    Thu Dec 3 17:27:45 2020
1 Incremental                                             Thu Dec 3 17:41:04 2020
1 Incremental                                             Thu Dec 3 17:42:19 2020
1 Incremental                                             Thu Dec 3 18:45:42 2020
1 Incremental                                             Thu Dec 3 18:46:31 2020
-----
No orphaned or incomplete backup sets found.
vagrant@node2:~$
```

Web Browser Content:

The web browser shows the 'duplidy' website, which provides instructions on how to use the tool. The page includes a 'CHECK COLLECTION STATUS' section and a 'REMOVE OLD INCREMENTAL BACKUPS' section.

2. Despliegue de NextCloud

instalar docker en nuestro nodo1.

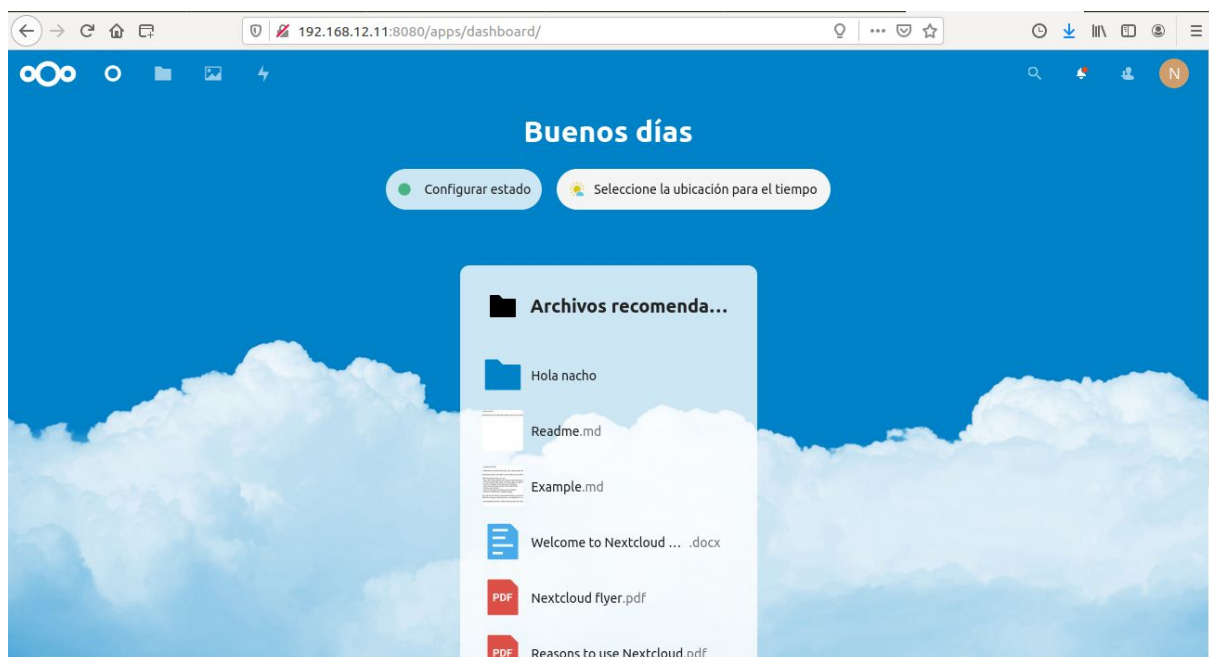
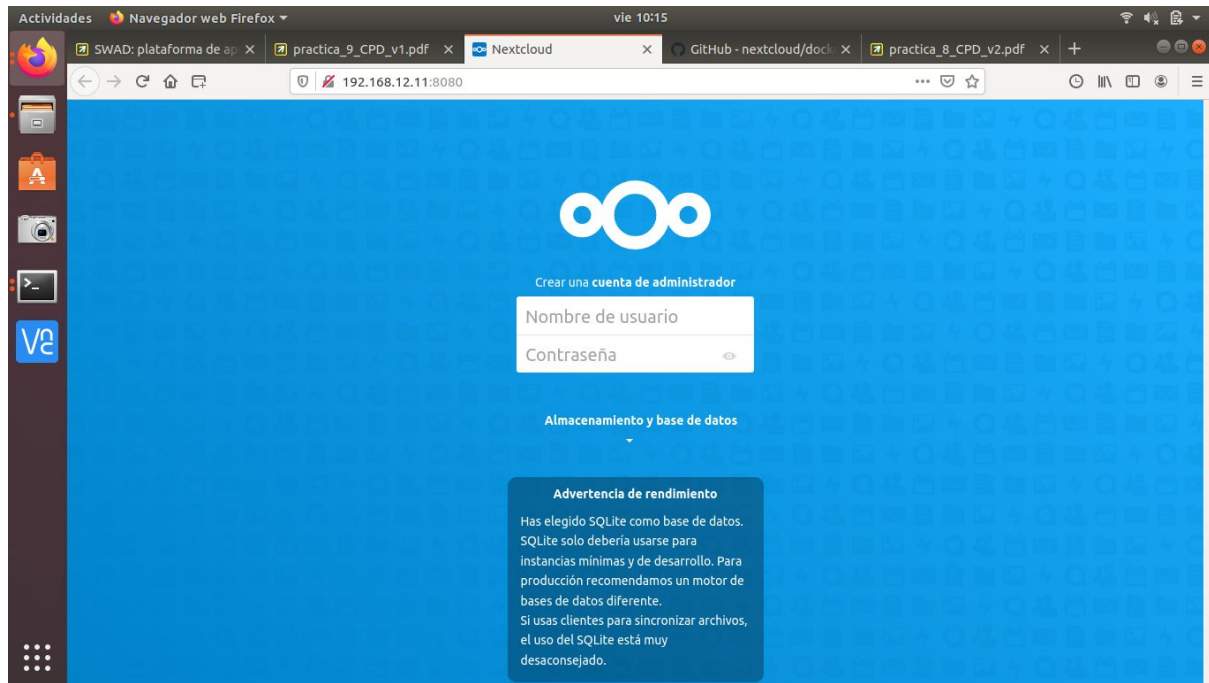


```
Actividades Terminal
vagrant@nodo1: ~
Processes: 111
* Introducing self-healing high availability clusters in MicroK8s.
Simple, hardened, Kubernetes for production, from RaspberryPi to DC
https://microk8s.io/high-availability
5 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable
Last login: Thu Dec 3 17:23:13 2020 from 10.0.2.2
vagrant@nodo1:~$ docker run -d -p 8080:80 nextcloud
Unable to find image 'nextcloud:latest' locally
latest: Pulling from library/nextcloud
852e58cd189d: Downloading 12.27MB/27.11MB
0266fc315b01: Download complete
4c8a5fa787a1: Downloading 10.19MB/76.65MB
46fc127c1884: Download complete
f768b7f7adf16: Download complete
345b578c1a78: Download complete
90aafe41e78d: Waiting
0b5d7691301b: Waiting
e06cc2d9e2f8: Waiting
6e9815fb33e7: Waiting
9c620d71744c: Waiting
66ef24dcaca4: Waiting
83f52dab9487: Waiting
ff0cf4699a7c: Waiting
61c81276e6e3: Waiting
e804ba2481bd: Waiting
5341acd1f2b0: Waiting
242c89a76899: Waiting
93734026da15: Waiting
990d88b1557e: Waiting
```

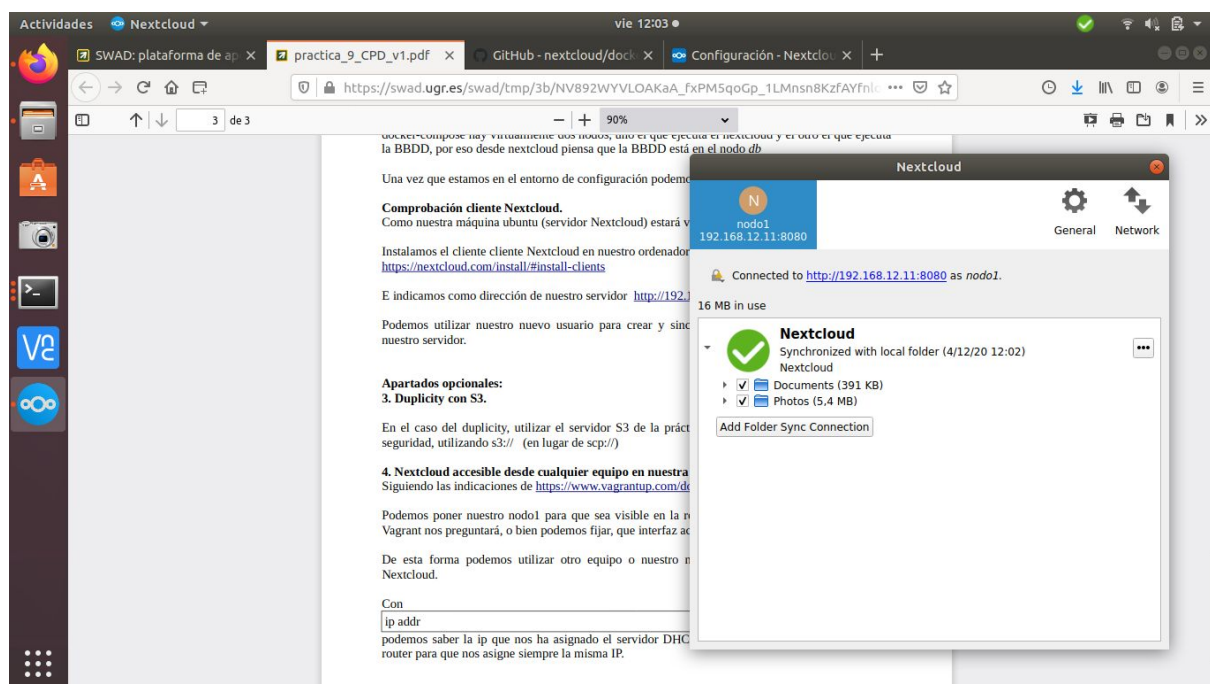
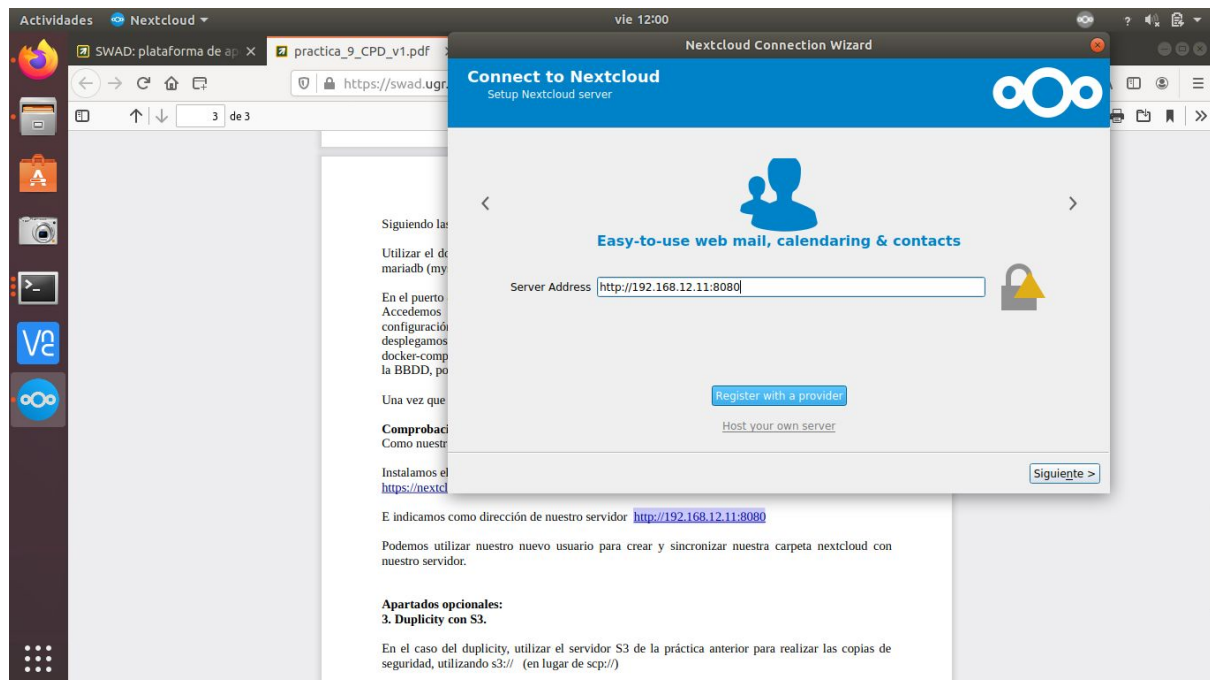
Accedemos a <http://192.168.12.11:8080> desde nuestro ordenador para continuar con la configuración

MYSQL/MariaDB:

- `MYSQL_DATABASE` Name of the database using mysql / mariadb.
- `MYSQL_USER` Username for the database using mysql / mariadb.
- `MYSQL_PASSWORD` Password for the database user using mysql / mariadb.
- `MYSQL_HOST` Hostname of the database server using mysql / mariadb.



Instalamos el cliente cliente Nextcloud en nuestro ordenador E indicamos como dirección de nuestro servidor



He creado en mi carpeta conpartida un fichero llamado “hola nacho”, y aparece en la web tambien.

