

Name: Muhammad Usman

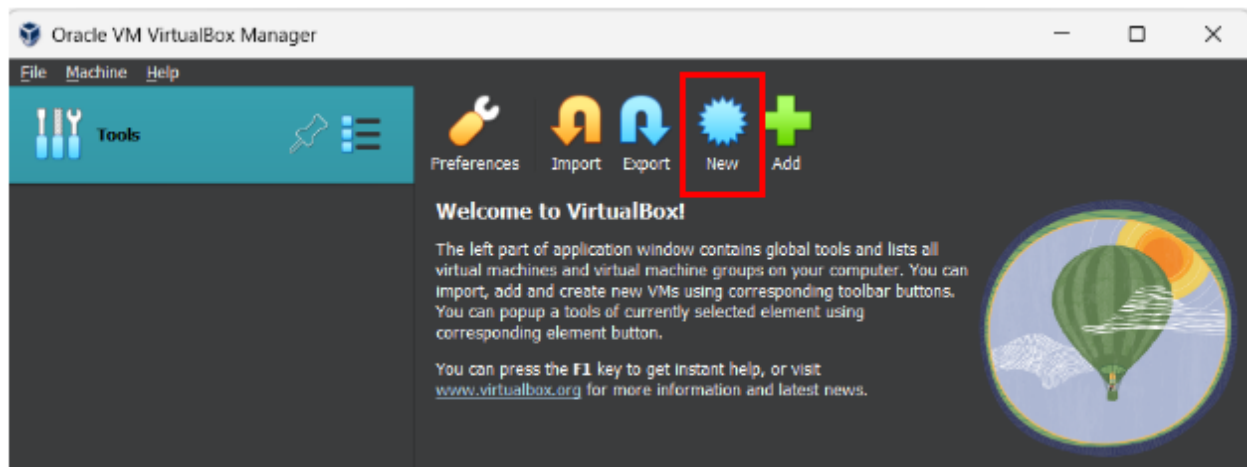
Roll no: 19P-0116

Section: C

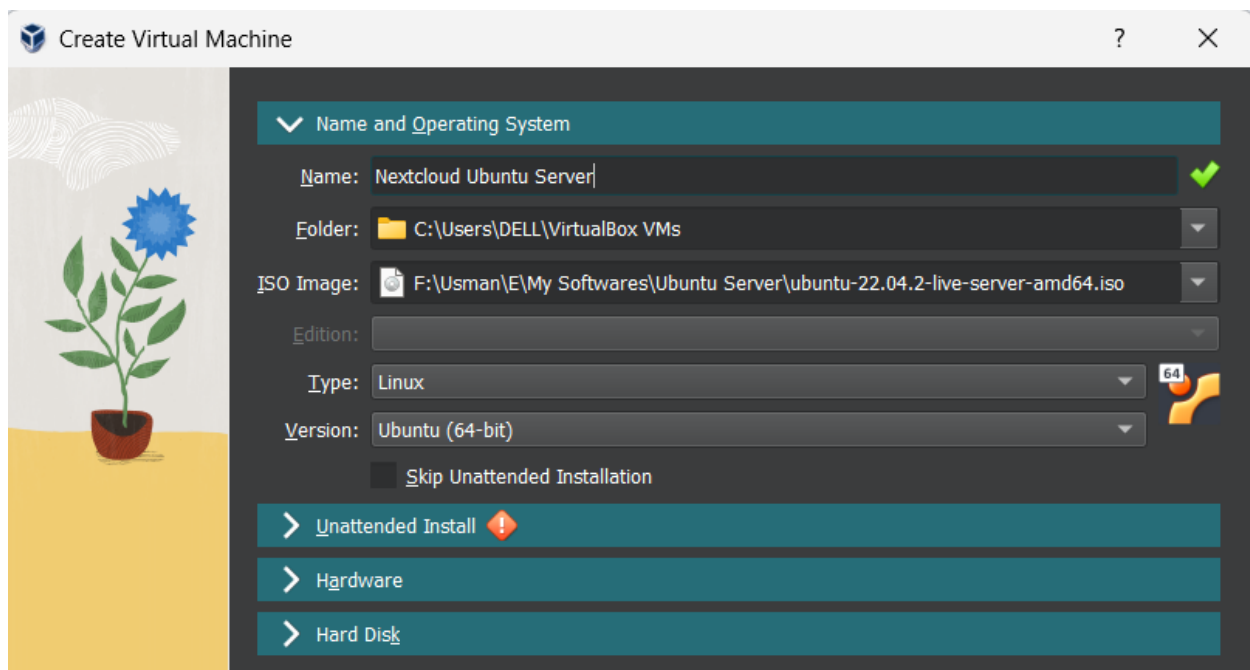
Setting up Next Cloud:

After downloading and installing the latest version of Virtual Box. To set the Next Cloud download the disk image of Ubuntu Server. And then follow the steps mentioned below:

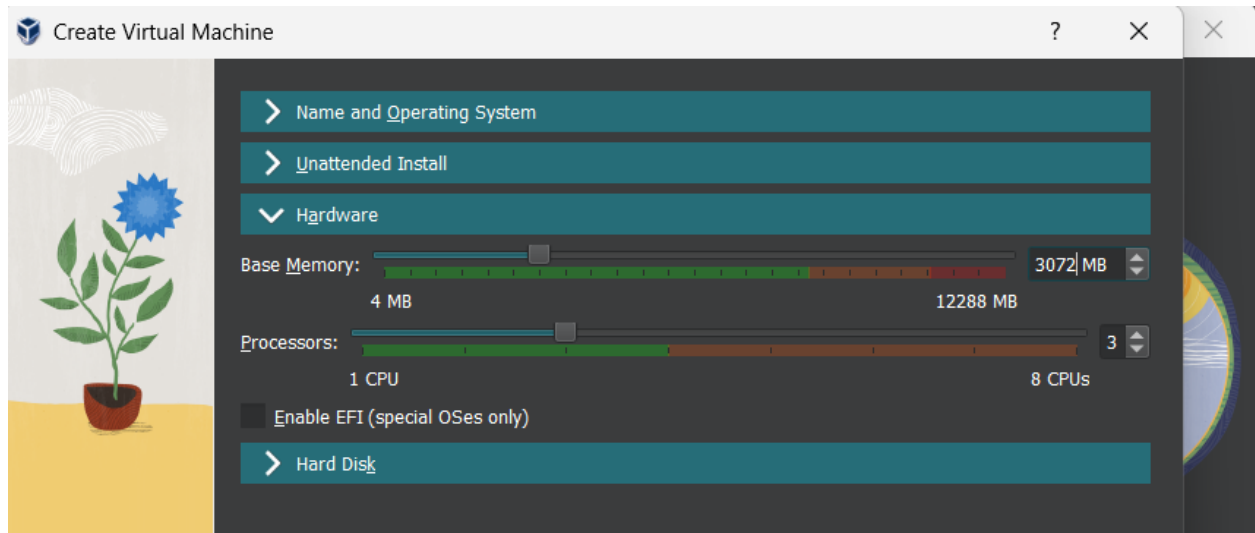
1) Click **New**, To create a new VM.



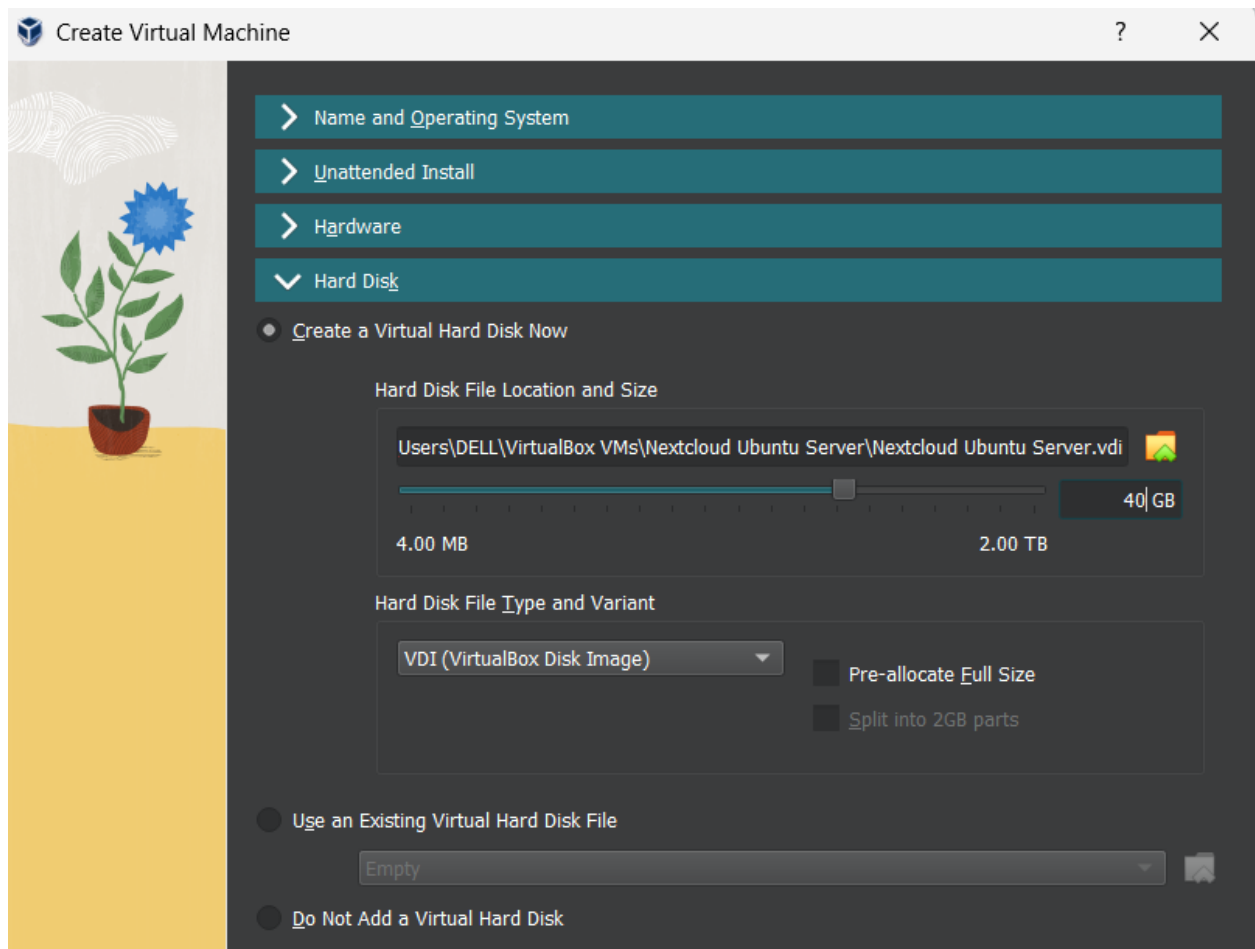
2) Name the operating system and select the disk image of the Ubuntu Server.



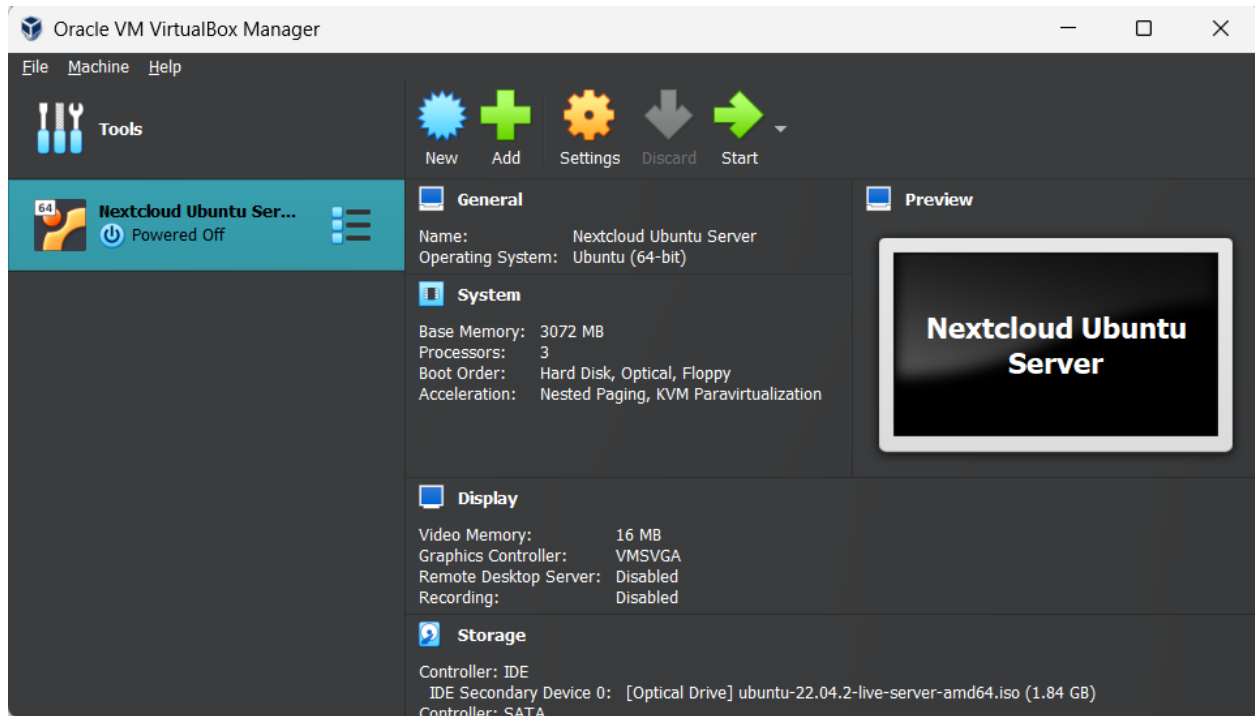
3) Set the hardware resources like RAM and CPU to the VM.



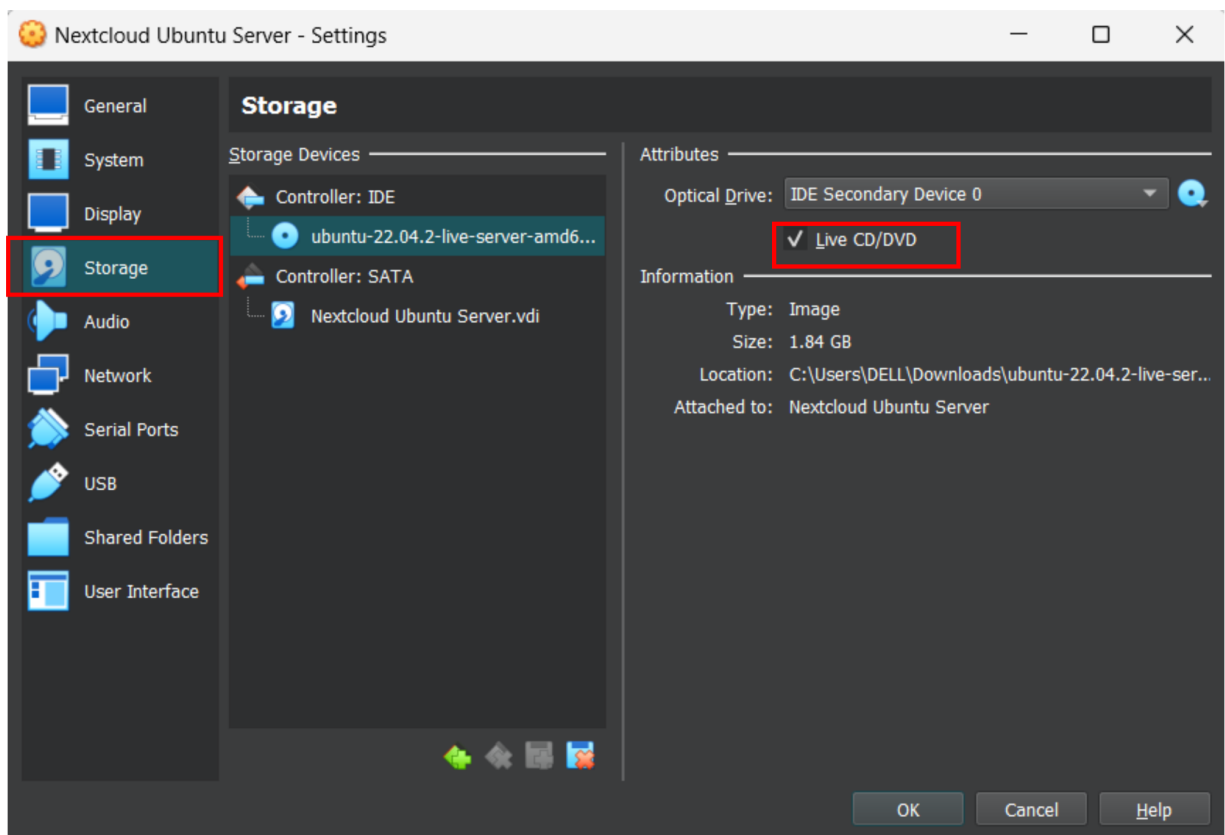
4) Set the Storage resource for the operating system and the actual cloud storage.



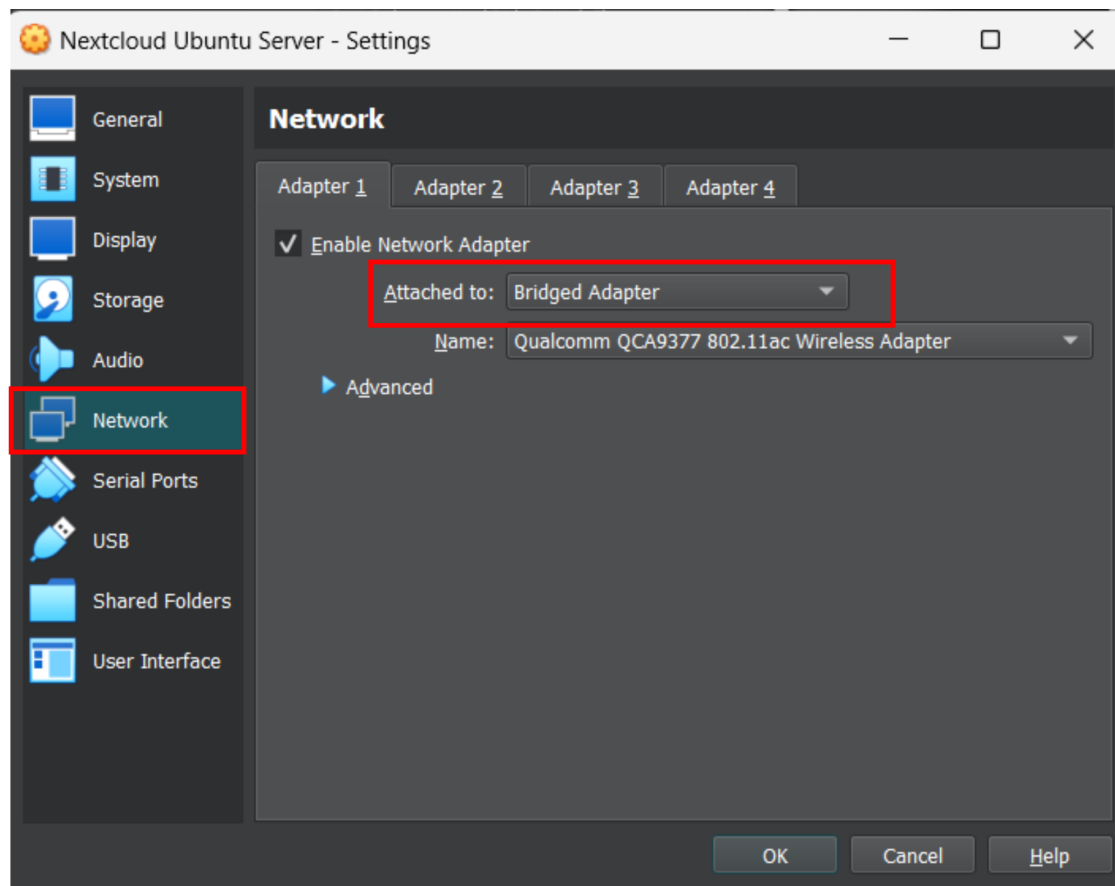
5) Click on **Settings**.



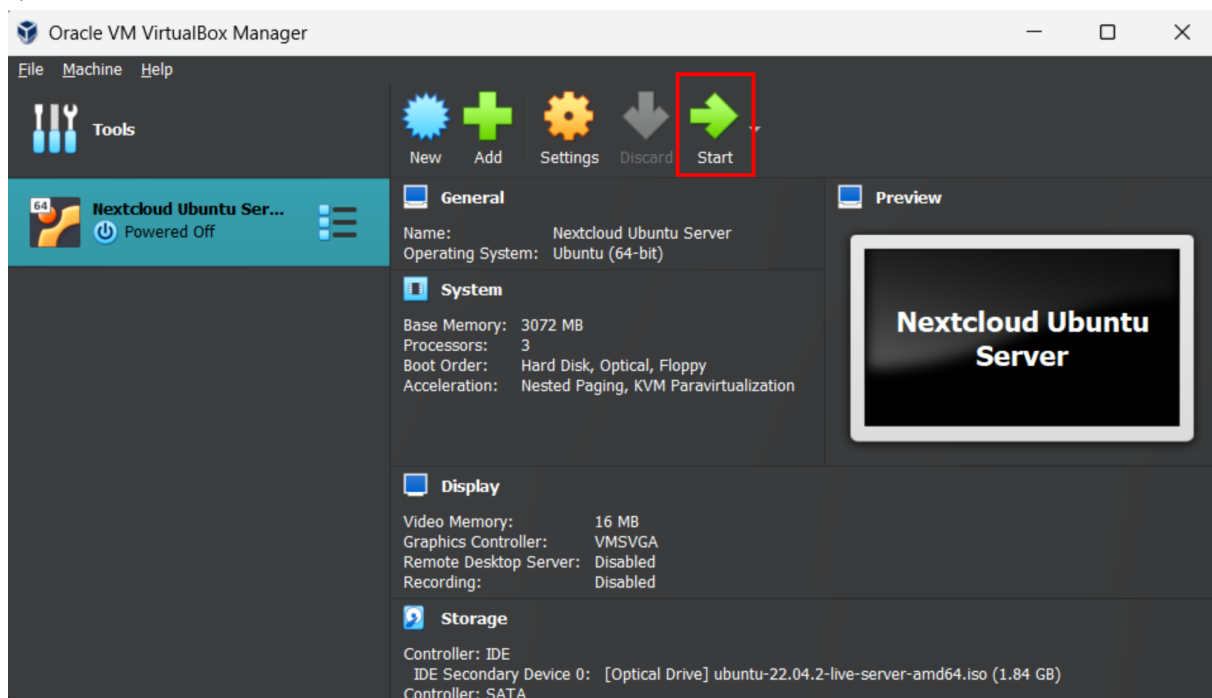
6) Goto **Storage** section, and then check the **Live CD/DVD** and click **OK**.



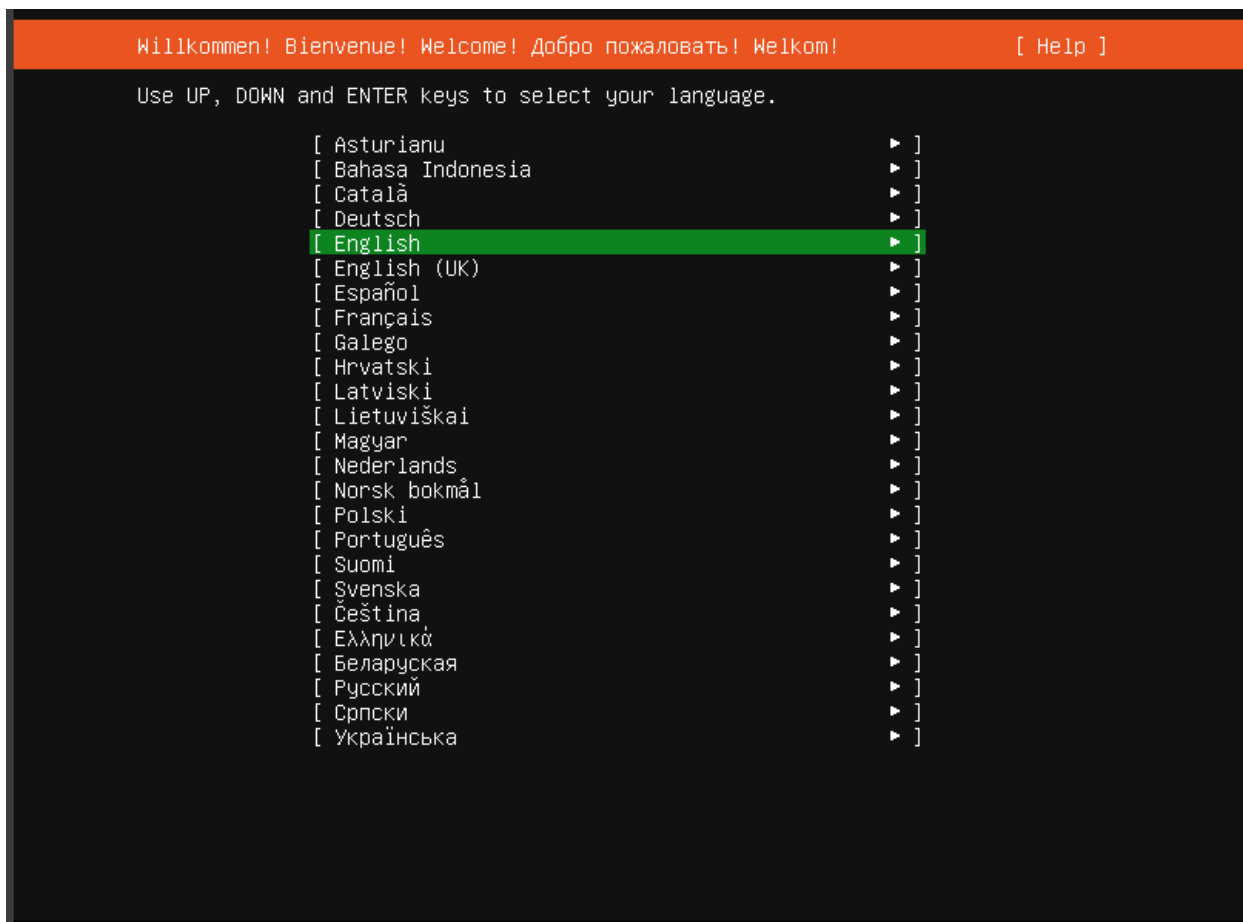
7) Now goto **Network** section and change the “Attached to” and select **Bridged Adapter**.



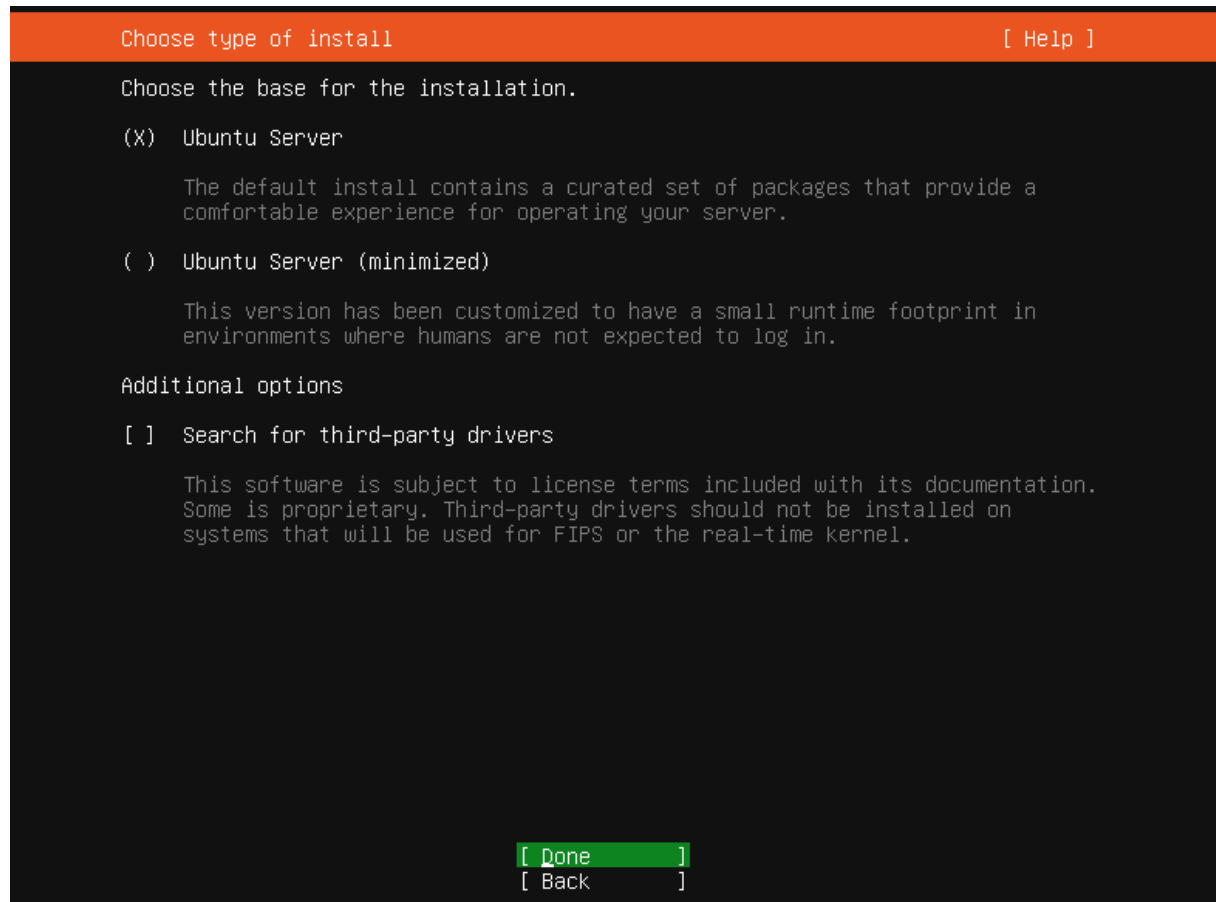
8) Click on **Start**, to start the VM.



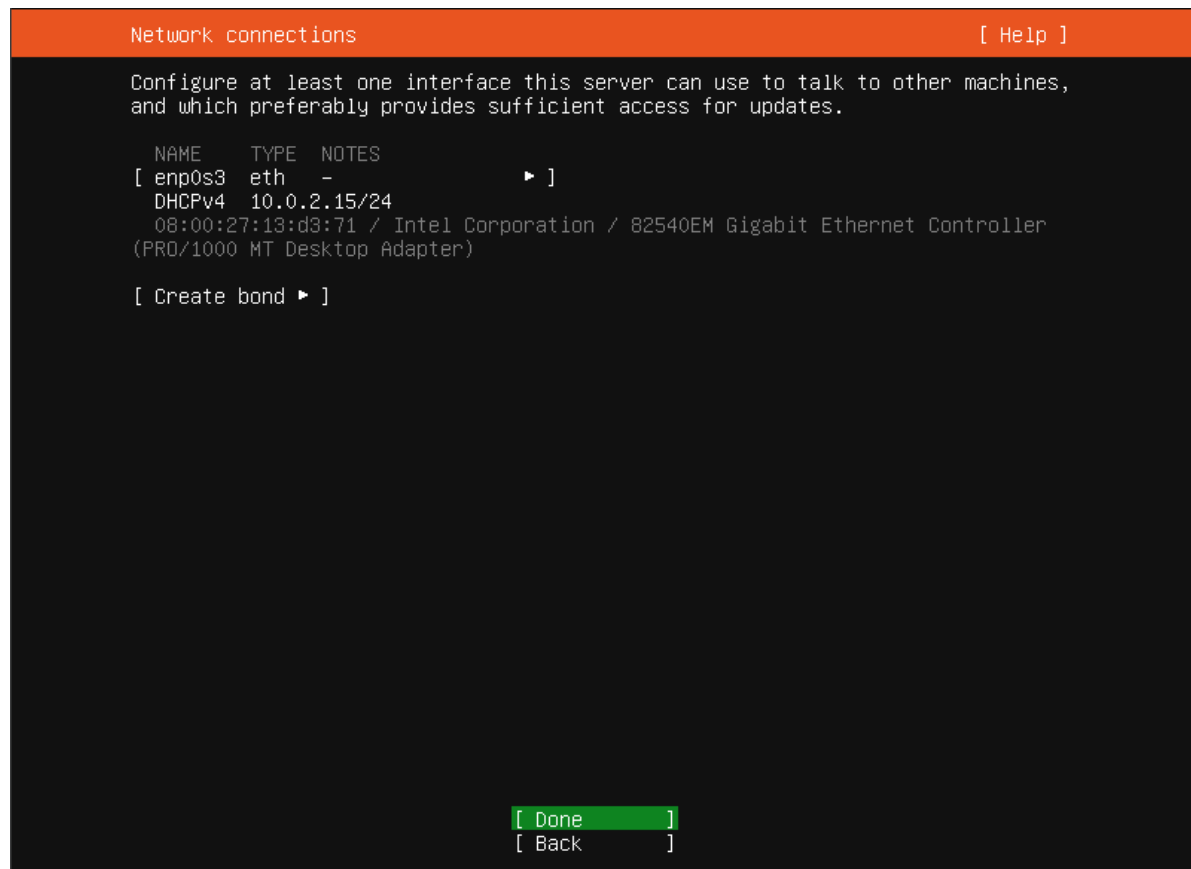
8) Press enter on **Try or Install Ubuntu Server**, the menu below will be shown:



9) Press Enter to install Ubuntu Server.



10) Choose the network adapter Ubuntu Server will use and press Enter.



11) Leave the proxy address blank and press Enter.

Configure proxy

[Help]

If this system requires a proxy to connect to the internet, enter its details here.

Proxy address:

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user] [:pass]@]host[:port]/".

[Done]

[Back]

12) Press Enter on the mirror address.

Configure Ubuntu archive mirror

[Help]

If you use an alternative mirror for Ubuntu, enter its details here.

Mirror address:

You may provide an archive mirror that will be used instead of the default.

13) Complete the storage configuration.

Guided storage configuration [Help]

Configure a guided storage layout, or create a custom one:

☒ Use an entire disk

[VBOX_HARDDISK_VBd381f41c-7fba3b17 local disk 40.000G ▾]

☒ Set up this disk as an LVM group

☐ Encrypt the LVM group with LUKS

Passphrase:

Confirm passphrase:

☐ Custom storage layout

14) The file system summary will be shown.

Storage configuration [Help]

FILE SYSTEM SUMMARY

MOUNT POINT	SIZE	TYPE	DEVICE	TYPE
[/	18.996G	new ext4	new LVM logical volume	▸]
[/boot	2.000G	new ext4	new partition of local disk	▸]

AVAILABLE DEVICES

DEVICE	TYPE	SIZE
[ubuntu-vg (new)	LVM volume group	37.996G ▸]
free space		19.000G ▸]

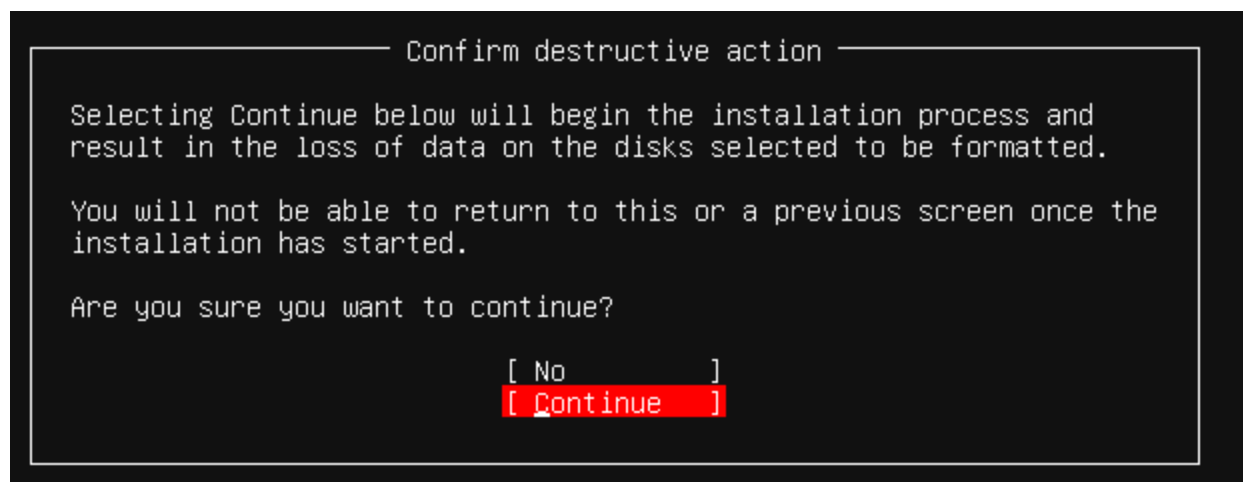
[Create software RAID (md) ▸]

[Create volume group (LVM) ▸]

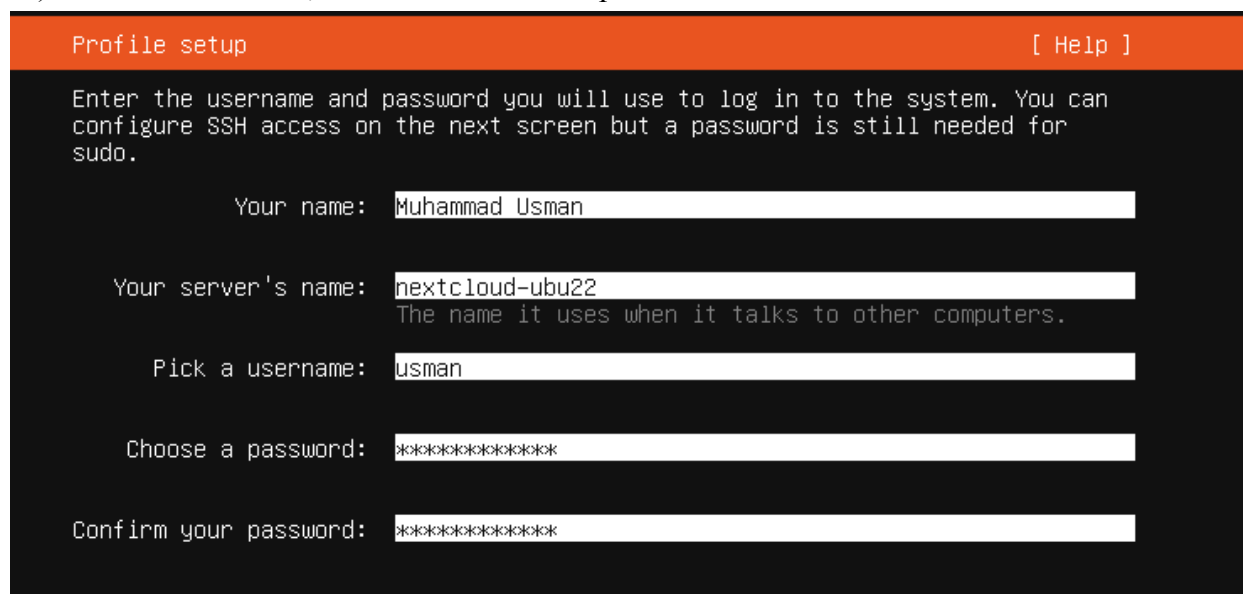
USED DEVICES

DEVICE	TYPE	SIZE
[ubuntu-vg (new)	LVM volume group	37.996G ▸]
ubuntu-lv	new, to be formatted as ext4, mounted at /	18.996G ▸]
[VBOX_HARDDISK_VBd381f41c-7fba3b17	local disk	40.000G ▸]
partition 1	new, BIOS grub spacer	1.000M ▸]
partition 2	new, to be formatted as ext4, mounted at /boot	2.000G ▸]
partition 3	new, PV of LVM volume group ubuntu-vg	37.997G ▸]

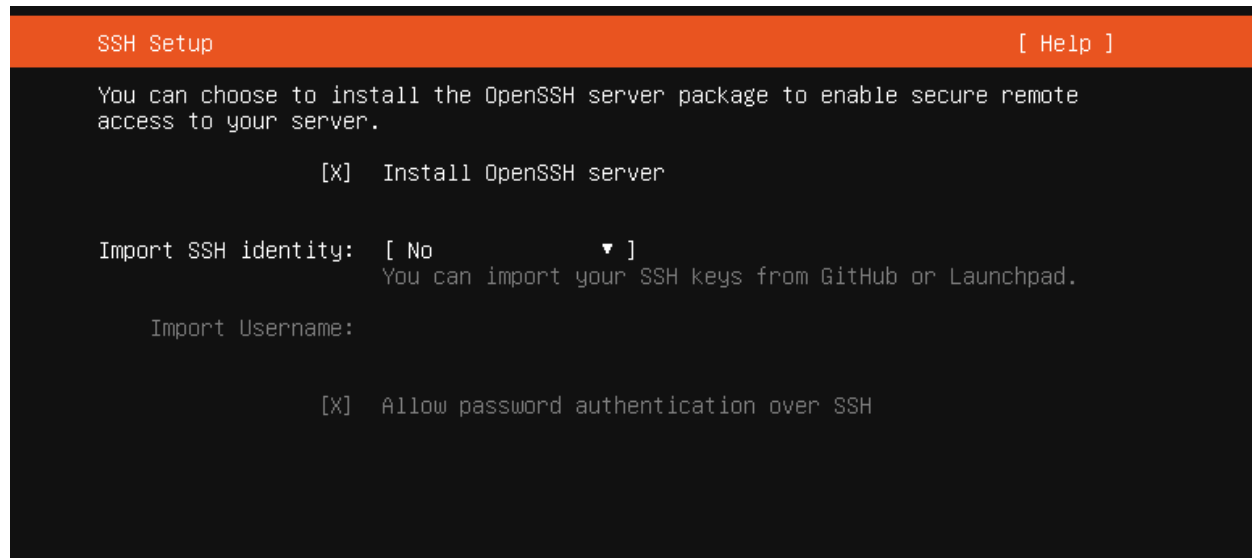
15) Press Enter to continue if the configurations are correct.



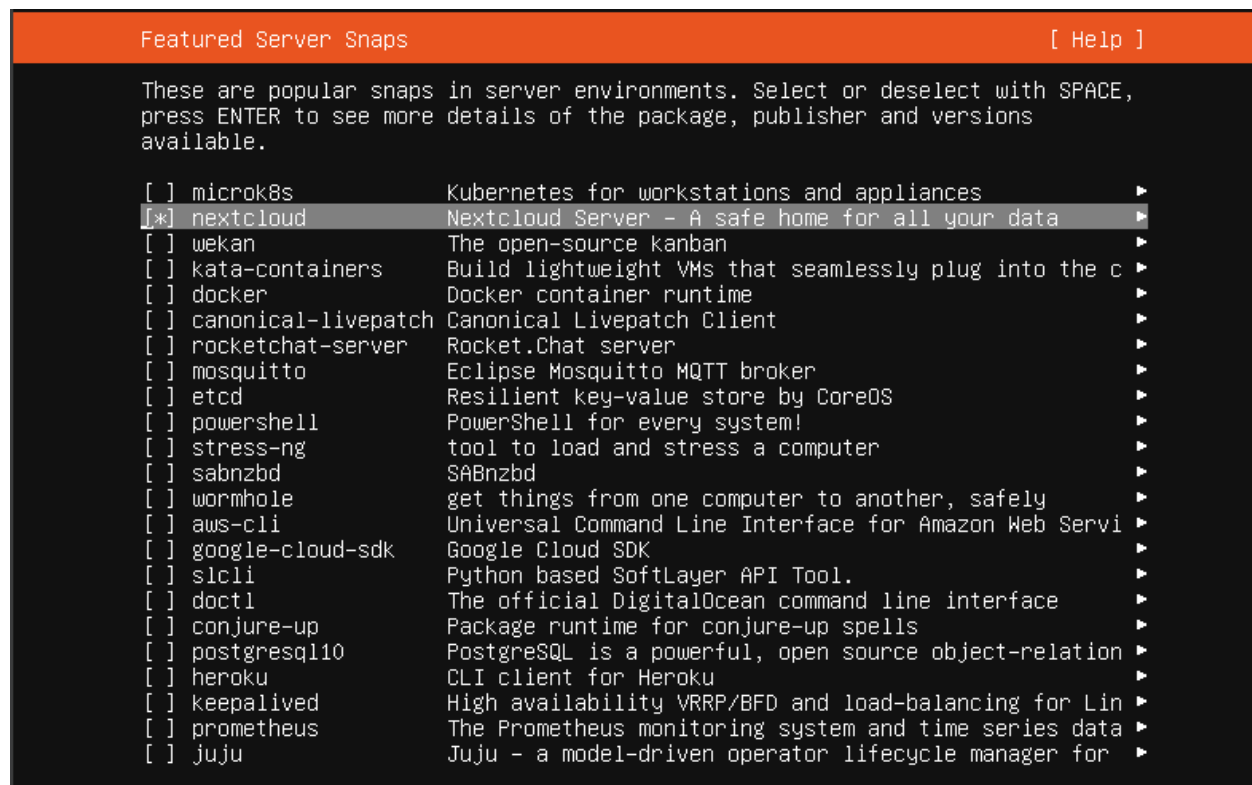
16) Set the server name, username and set the password.



17) Install OpenSSH server .



18) Select nextcloud and press Enter on Done.



19) The installation process will start.

Install complete!

[Help]

```
curtin command install
  configuring installed system
    running 'mount --bind /cdrom /target/cdrom'
    running 'curtin in-target -- setupcon --save-only'
  curtin command in-target
    running 'curtin curthooks'
  curtin command curthooks
    configuring apt configuring apt
    installing missing packages
    configuring iscsi service
    configuring raid (mdadm) service
    installing kernel
    setting up swap
    apply networking config
    writing etc/fstab
    configuring multipath
    updating packages on target system
    configuring pollinate user-agent on target
    updating initramfs configuration
    configuring target system bootloader
    installing grub to target devices
final system configuration
  configuring cloud-init
  calculating extra packages to install
  installing openssh-server
    curtin command system-install
  downloading and installing security updates
    curtin command in-target |
```

[View full log]

[Cancel update and reboot]

20) Press Enter on Reboot Now after the installation.

```
configuring cloud-init
calculating extra packages to install
installing openssh-server
  curtin command system-install
downloading and installing security updates
  curtin command in-target
restoring apt configuration
  curtin command in-target
subiquity/Late/run
```

[View full log]

[Reboot Now]

21) Login using your nextcloud credentials.

```
nextcloud-ubu22 login: usman
Password:
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.15.0-67-generic x86_64)

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

System information as of Sat Mar 25 01:13:16 PM UTC 2023

System load:  0.505859375      Processes:           144
Usage of /:   33.4% of 18.53GB  Users logged in:    0
Memory usage: 13%              IPv4 address for enp0s3: 10.0.2.15
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

24 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

usman@nextcloud-ubu22:~$ _
```

22) Enter the following command:

sudo apt-get update && sudo apt-get upgrade && sudo apt-get dist-upgrade

Press Y and continue.

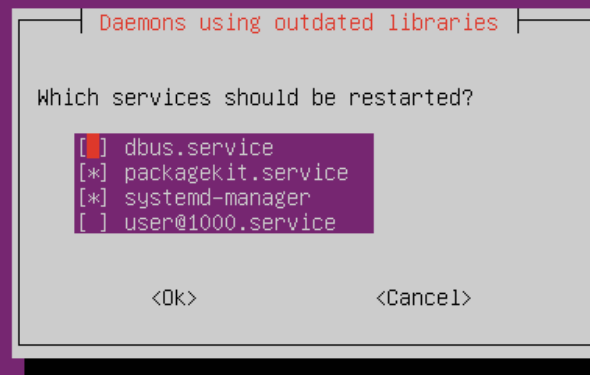
```

usman@nextcloud-ubu22:~$ sudo apt-get update && sudo apt-get upgrade && sudo apt-get dist-upgrade
[sudo] password for usman:
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:3 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://pk.archive.ubuntu.com/ubuntu jammy-security InRelease
Fetched 119 kB in 3s (35.6 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  apparmor cloud-init isc-dhcp-client isc-dhcp-common libapparmor1 libldap-2.5-0 libldap-common
  libmbim-glib4 libmbim-proxy libmm-glib0 libnetplan0 libqmi-glib5 libqmi-proxy libsasl2-2
  libsasl2-modules libsasl2-modules-db modemmanager netplan.io python3-software-properties
  software-properties-common systemd-hwe-hwdb tcpdump ubuntu-advantage-tools
  update-notifier-common
24 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 5,219 kB of archives.
After this operation, 1,148 kB of additional disk space will be used.
Do you want to continue? [Y/n] _

```

23) Set the package configurations.

Package configuration



```
/etc/needrestart/restart.d/systemd-manager
systemctl restart packagekit.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
usman@nextcloud-ubu22:~$ _
```

24) Run command: **sudo ufw allow OpenSSH**

```
usman@nextcloud-ubu22:~$ sudo ufw allow OpenSSH
Rules updated
Rules updated (v6)
usman@nextcloud-ubu22:~$ sudo ufw enable
Firewall is active and enabled on system startup
usman@nextcloud-ubu22:~$ _
```

25) Run command: **sudo ufw status**

```
usman@nextcloud-ubu22:~$ sudo ufw status
Status: active

To Action From
--
OpenSSH ALLOW Anywhere
OpenSSH (v6) ALLOW Anywhere (v6)

usman@nextcloud-ubu22:~$
```

26) Run command: **sudo nextcloud.manual-install <username> <password>**

```
usman@nextcloud-ubu22:~$ sudo nextcloud.manual-install usman password
Nextcloud was successfully installed
usman@nextcloud-ubu22:~$
```

27) Run command: **sudo ufw allow 80,443/tcp**

```
usman@nextcloud-ubu22:~$ sudo ufw allow 80,443/tcp
[sudo] password for usman:
Rule added
Rule added (v6)
usman@nextcloud-ubu22:~$
```

28) Run command: **sudo nextcloud.occ config:system:get trusted_domains**

Check for available trusted domains.

```
usman@nextcloud-ubu22:~$ sudo nextcloud.occ config:system:get trusted_domains
localhost
10.0.2.15
usman@nextcloud-ubu22:~$
```

29) Run command: **ip a | grep inet**

```
usman@nextcloud-ubu22:~$ ip a | grep inet
inet 127.0.0.1/8 scope host lo
inet6 ::1/128 scope host 
inet 192.168.10.24/24 metric 100 brd 192.168.10.255 scope global dynamic enp0s3
inet6 fe80::a00:27ff:fe13:d371/64 scope link
```

30) Run command: **sudo nextcloud.occ config:system:set trusted_domains 1 --value 192.168.10.24**

Setting the ip address as a trusted domain for the server.

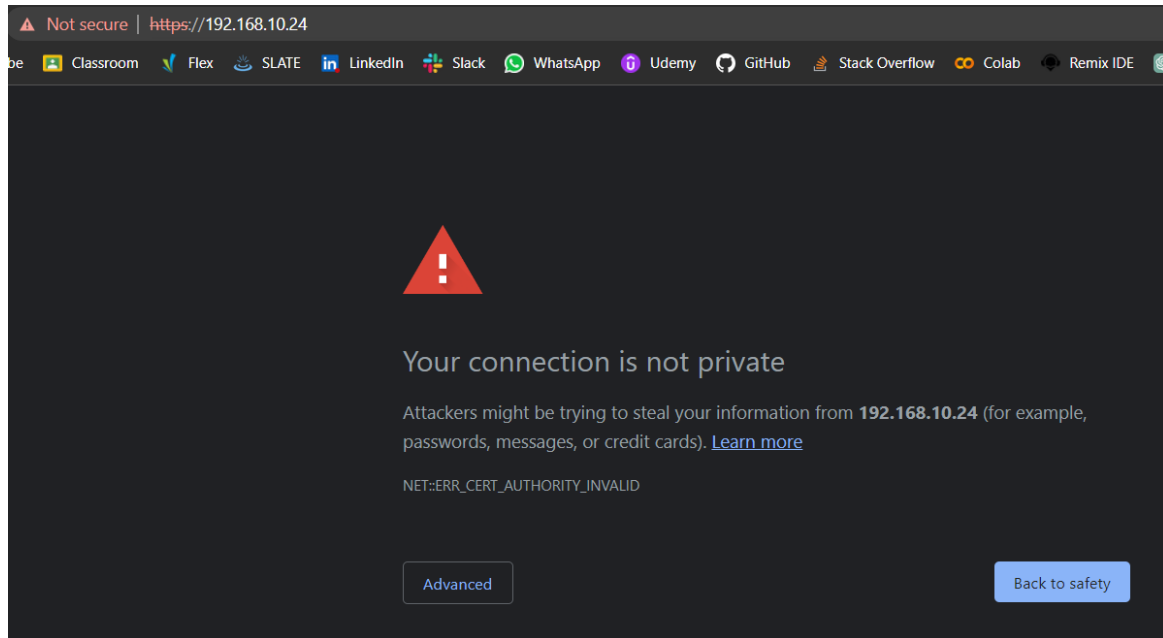
```
usman@nextcloud-ubu22:~$ sudo nextcloud.occ config:system:set trusted_domains 1 --value 192.168.10.24
System config value trusted_domains => 1 set to string 192.168.10.24
```

31) Run command: **sudo nextcloud.enable-https self-signed**

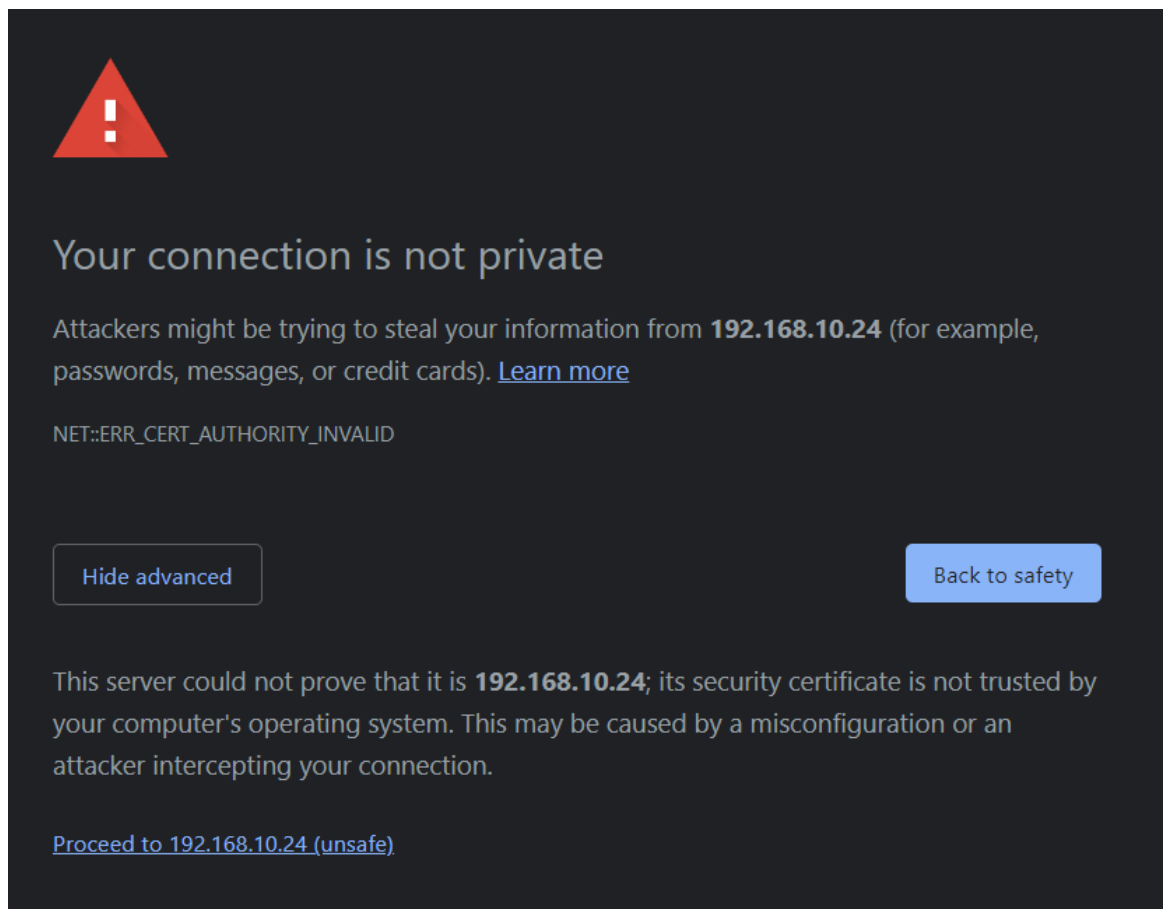
Self signing the certificate.

```
usman@nextcloud-ubu22:~$ sudo nextcloud.enable-https self-signed
Generating key and self-signed certificate... done
Restarting apache... done
usman@nextcloud-ubu22:~$ _
```

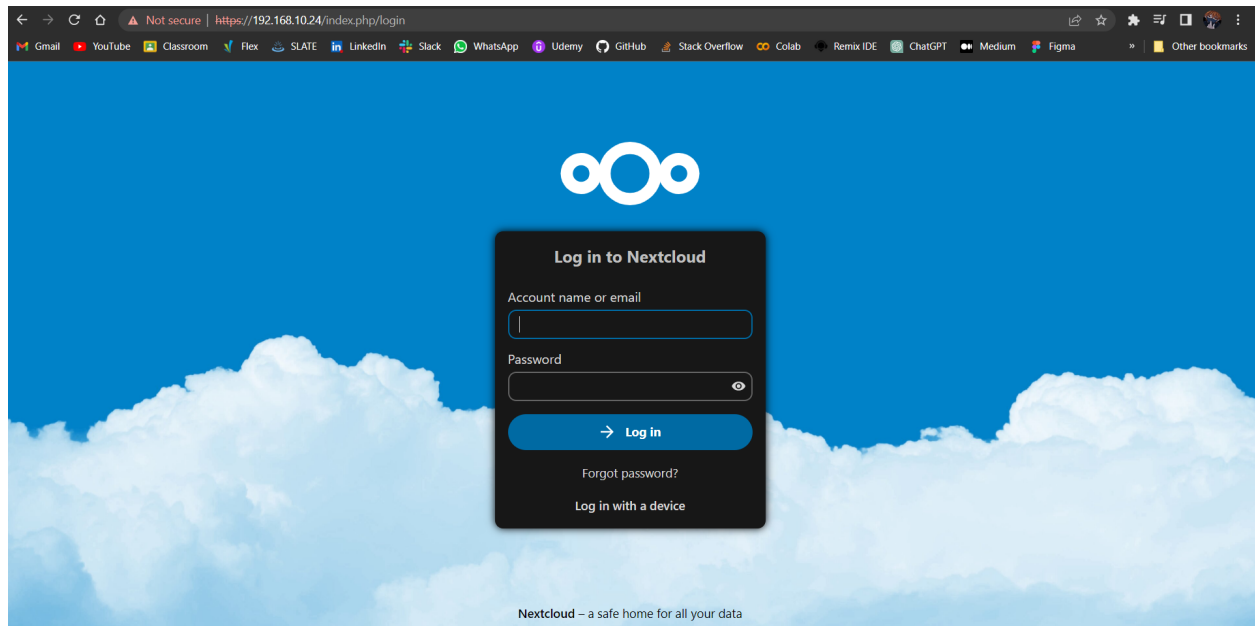
32) Goto the browser and enter the ip address (192.168.10.24) to access the nextcloud server.



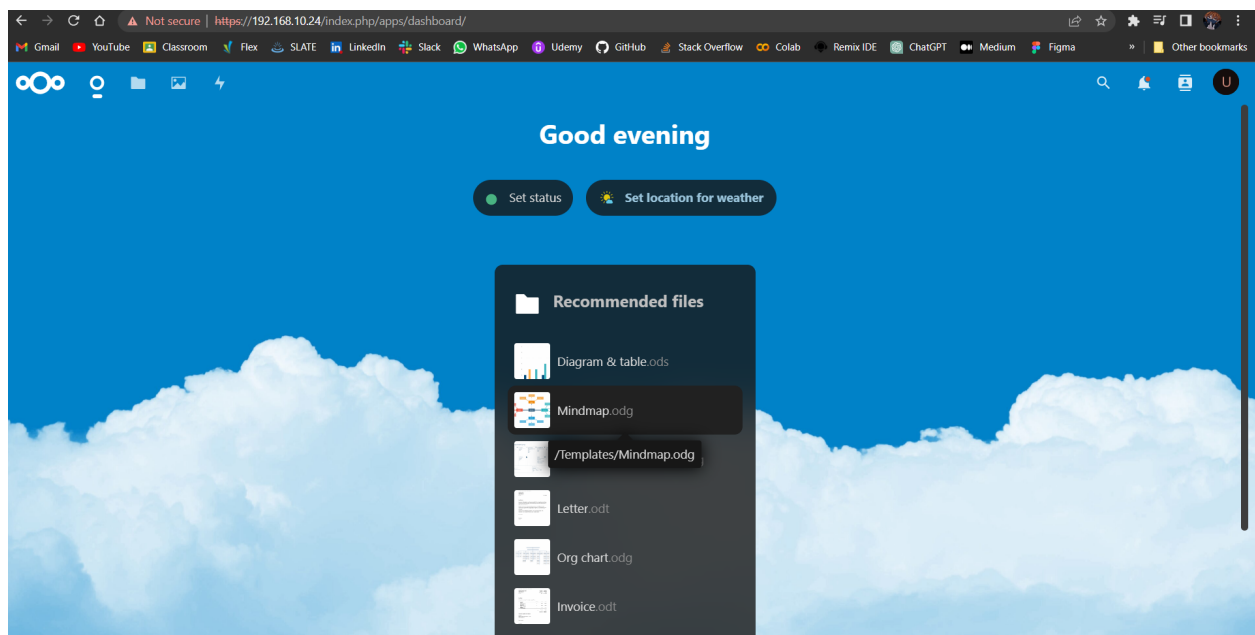
33) Click on Advanced, and click on Proceed to 192.168.10.24.



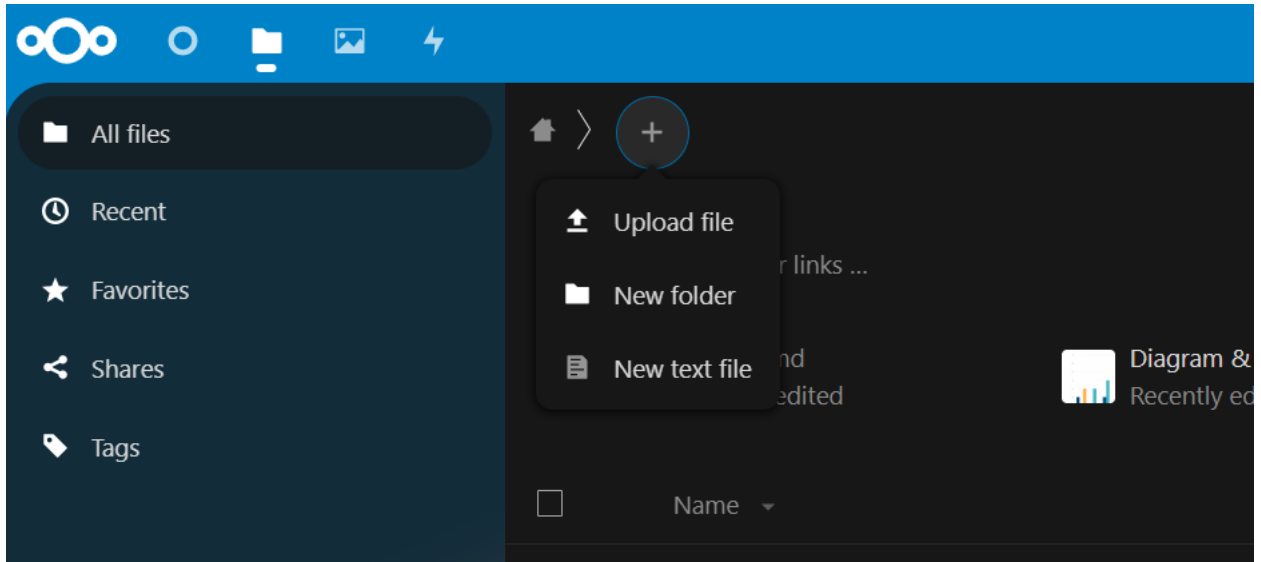
34) Enter the nextcloud credentials to Login.



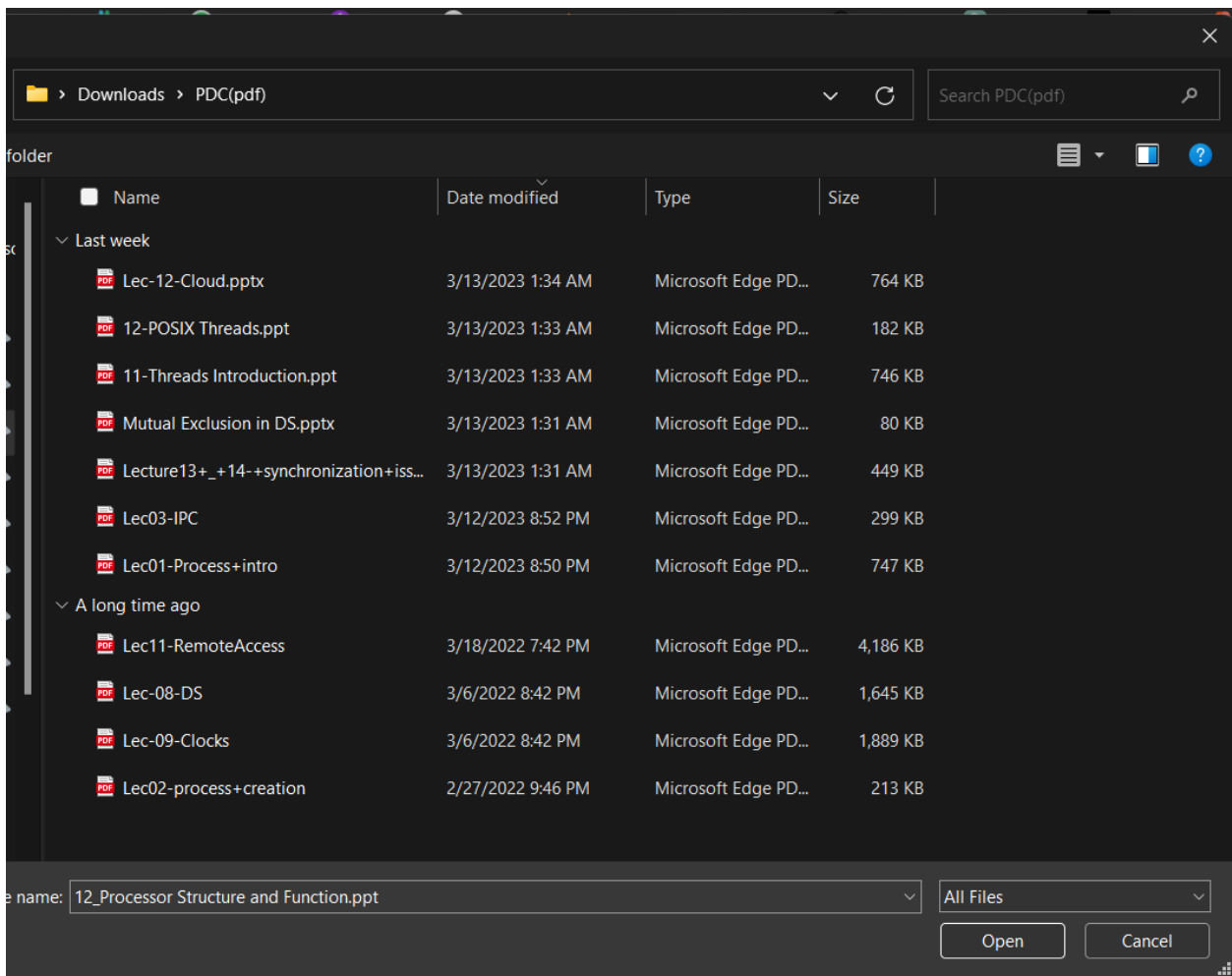
34) The welcome screen will be shown on successful Login.



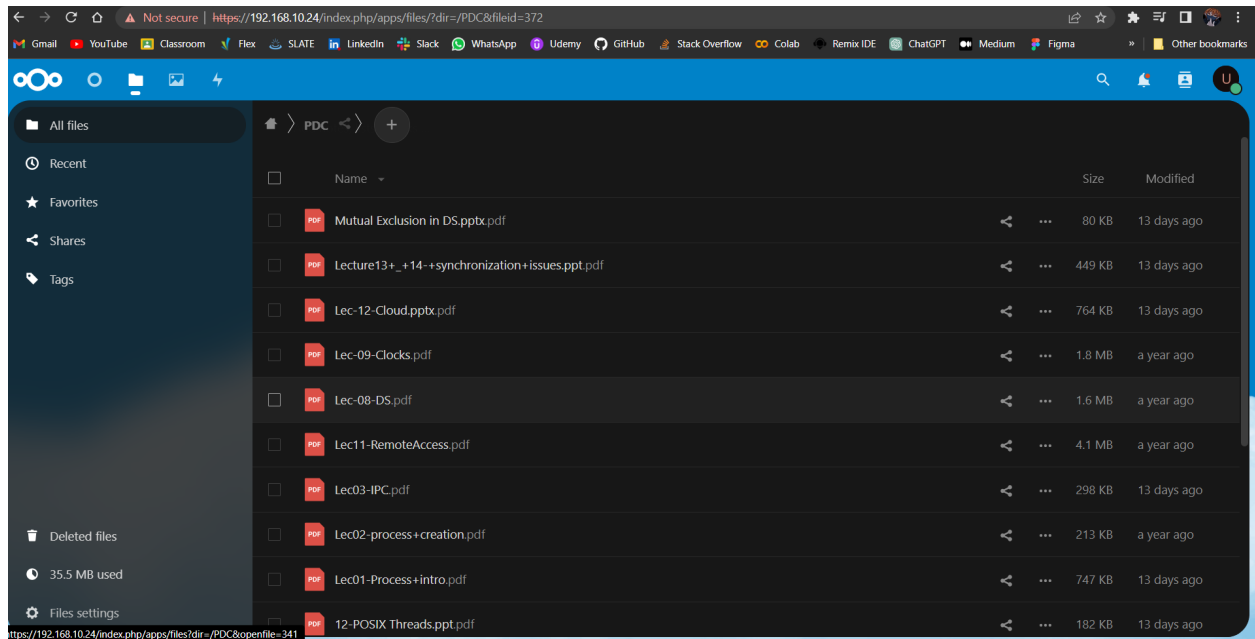
35) Click on **Files**, and press '+' to upload files on the server.



36) Select the files to be uploaded.

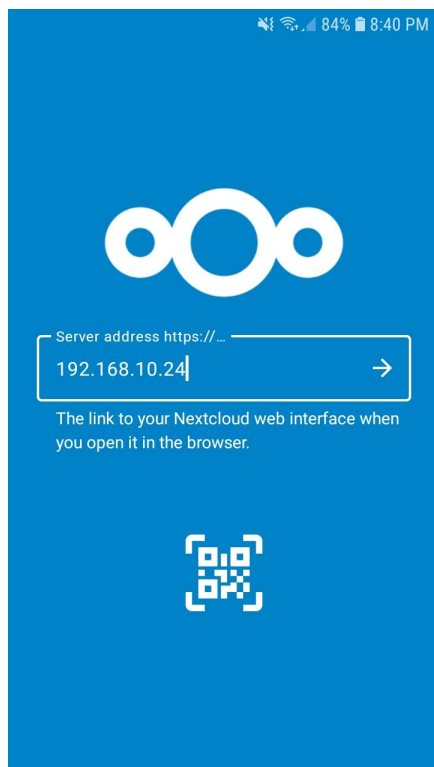


37) Create a new folder and move the files to it.

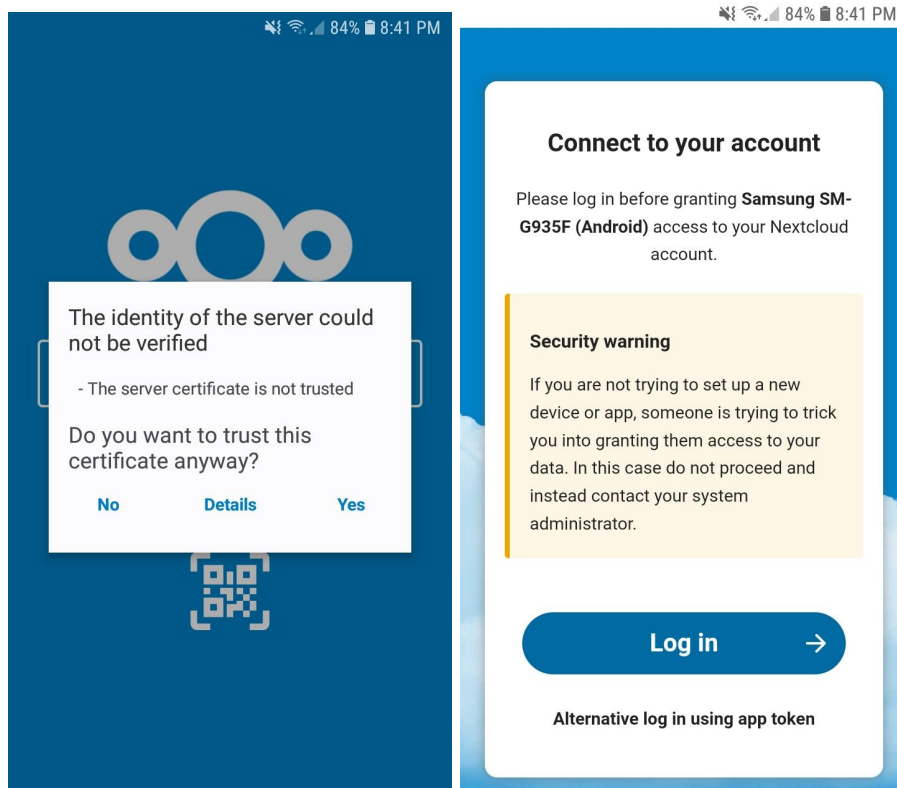


How to access Nextcloud on Mobile:

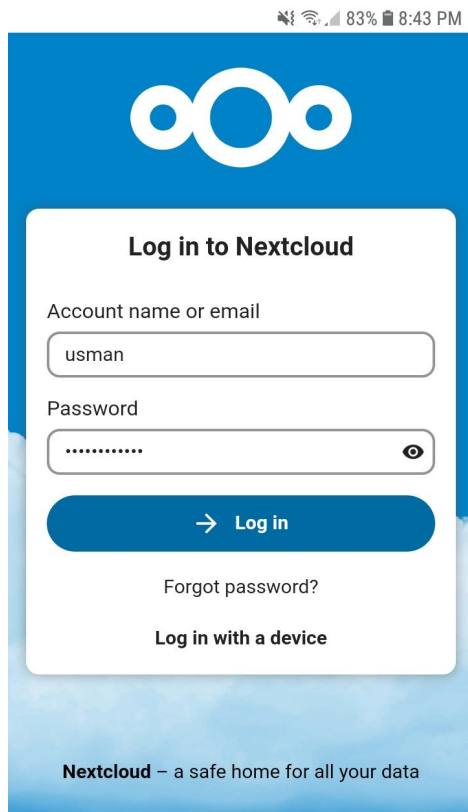
- 1) Install the Nextcloud app from the Play Store.
- 2) Open the app and Enter the ip address of your the nextcloud server:



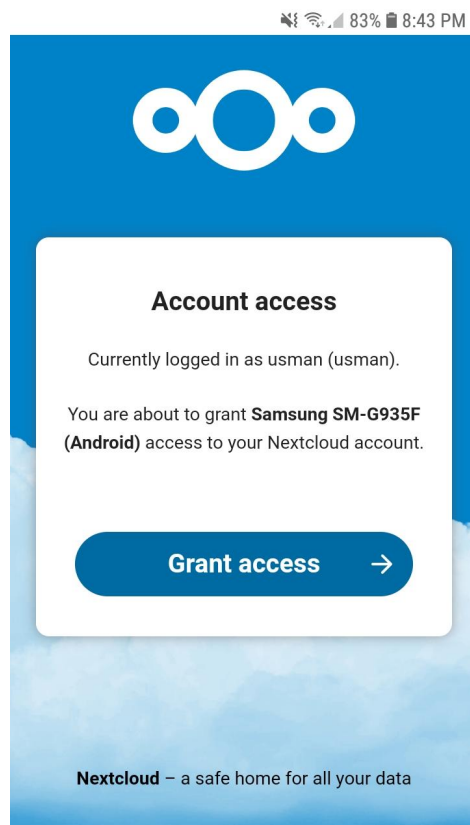
3) As the certificate is self signed. Press Yes to continue the login process.



4) Enter your credentials to Login:



5) Press Grant Access to continue.



6) Now you access the same file or media that you uploaded and upload from it to the server.

