



IUS
INSTITUT
UNIVERSITAIRE
DES SCIENCES

**FACULTÉ DES SCIENCES ET DES TECHNOLOGIES
(FST)**

Quatrième année

RAPPORT

Sur le Travail de Laboratoire № 2

COURS

Administration Système 1

Professeur

Ismael SAINT AMOUR

PRÉPARÉ PAR

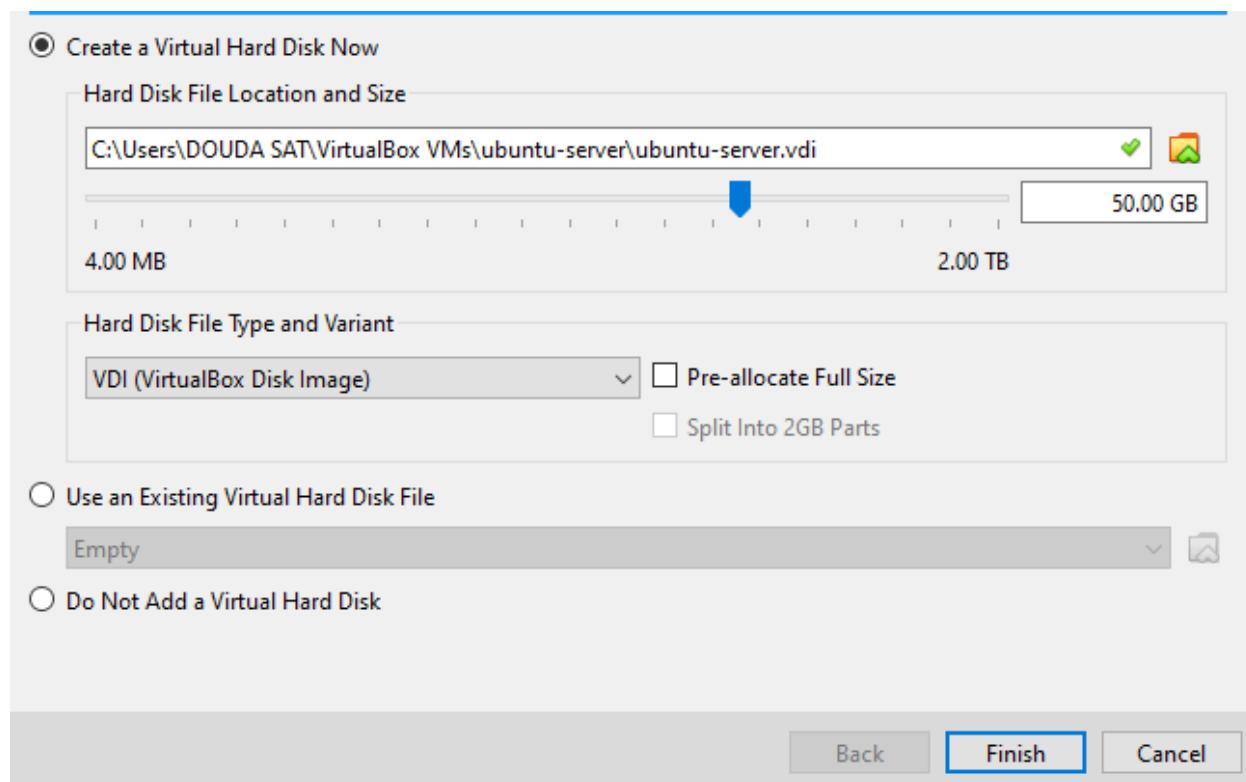
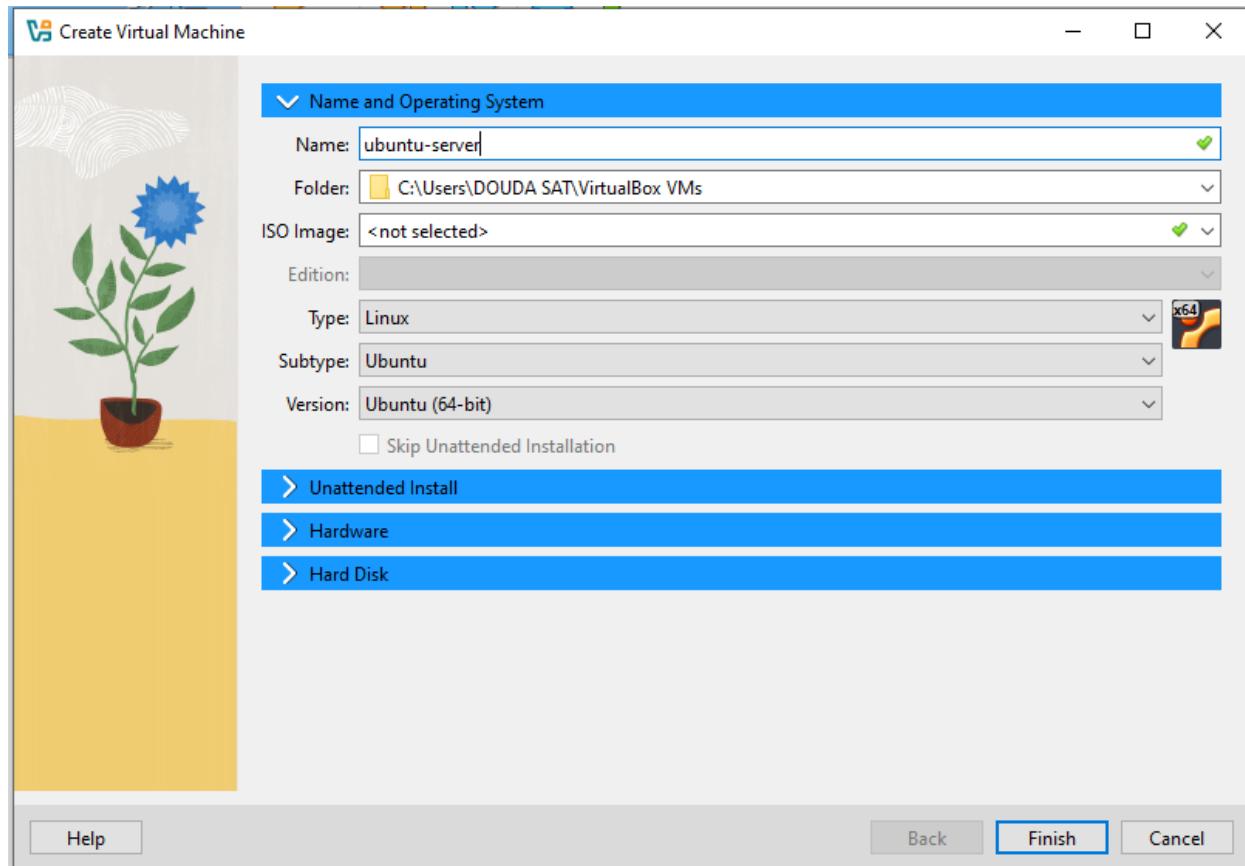
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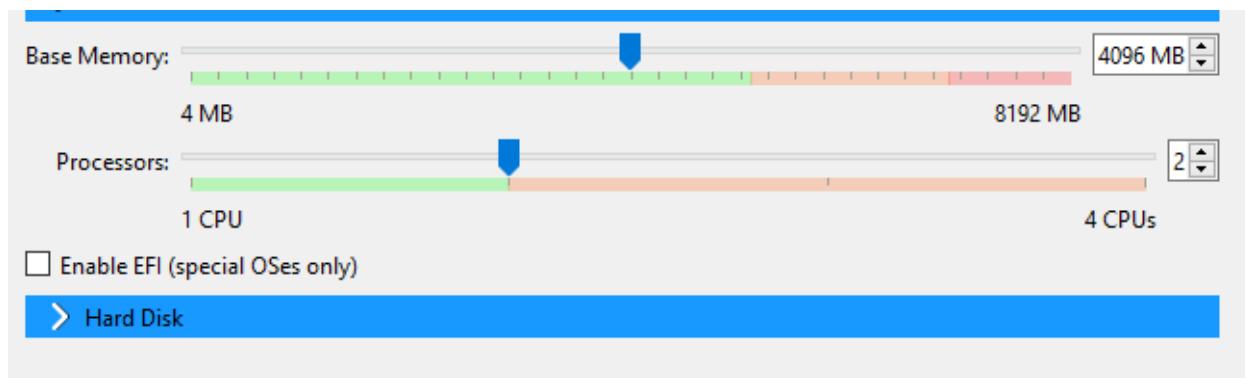
SEMESTRE

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Le 07/11/2025

1. Création de la Machine Virtuelle sur VirtualBox





Storage

Devices

- Controller: IDE
 - ubuntu-24.04.3-live-server-amd64.iso
- Controller: SATA
 - ubuntu-server.vdi

Attributes

Optical Drive: IDE Secondary Device

Live CD/DVD

Information

Type: Image
Size: 3.08 GB
Location: C:\Users\DOUDA SAT\Downloaded Files\ubuntu-24.04.3-live-server-amd64.iso
Attached to: ubuntu-server

New

General

Name: ubuntu-server
Operating System: Ubuntu (64-bit)

System

Base Memory: 4096 MB
Processors: 2
Boot Order: Floppy, Optical, Hard Disk
Acceleration: Nested Paging, KVM Paravirtualization

Display

Video Memory: 16 MB
Graphics Controller: VMSVGA
Remote Desktop Server: Disabled
Recording: Disabled

Storage

Controller: IDE
IDE Secondary Device 0: [Optical Drive] ubuntu-24.04.3-live-server-amd64.iso (3.08 GB)
Controller: SATA
SATA Port 0: ubuntu-server.vdi (Normal, 50.00 GB)

Audio

Host Driver: Default
Controller: ICH AC97

Network

Adapter 1: Intel PRO/1000 MT Desktop (NAT)

USB

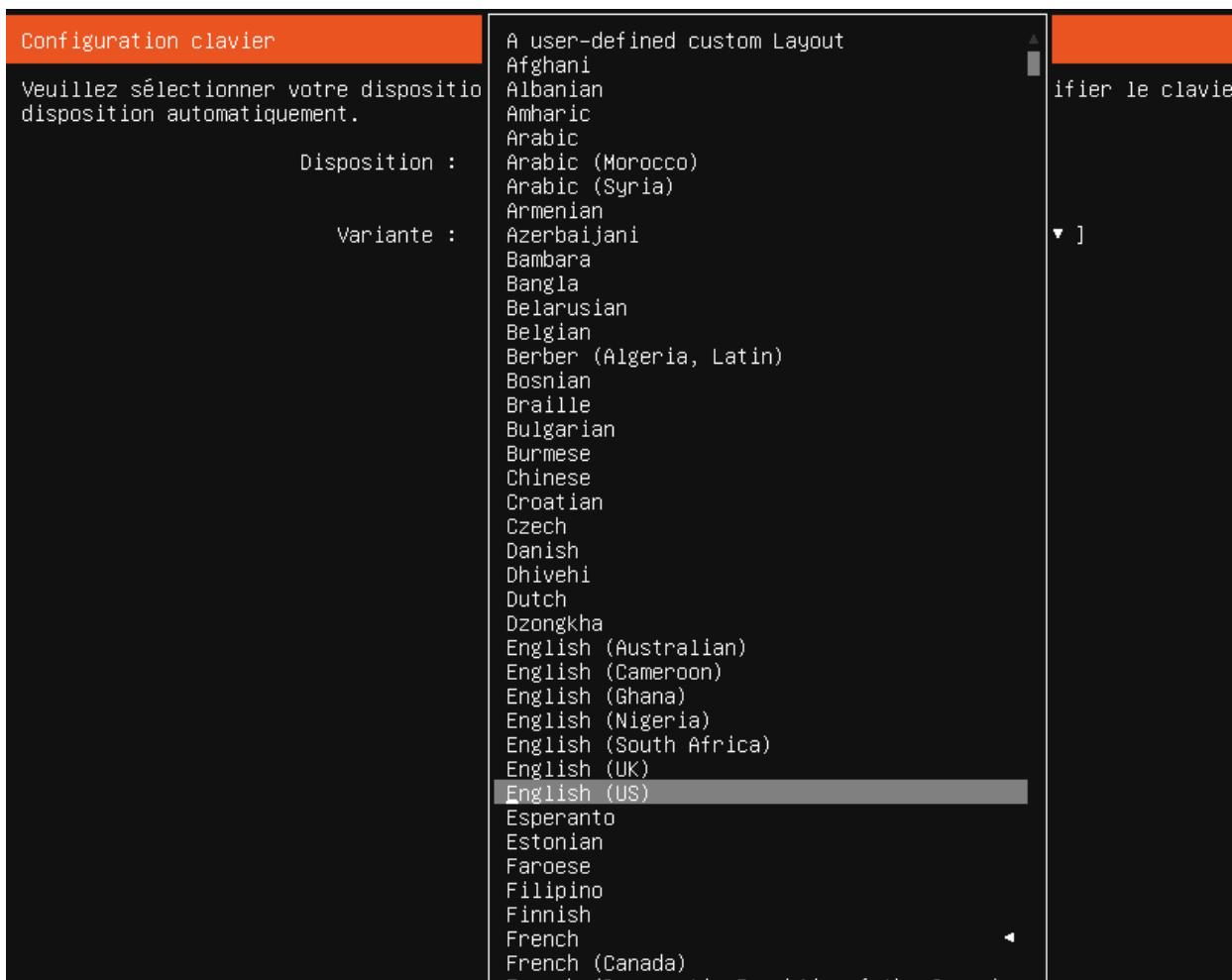
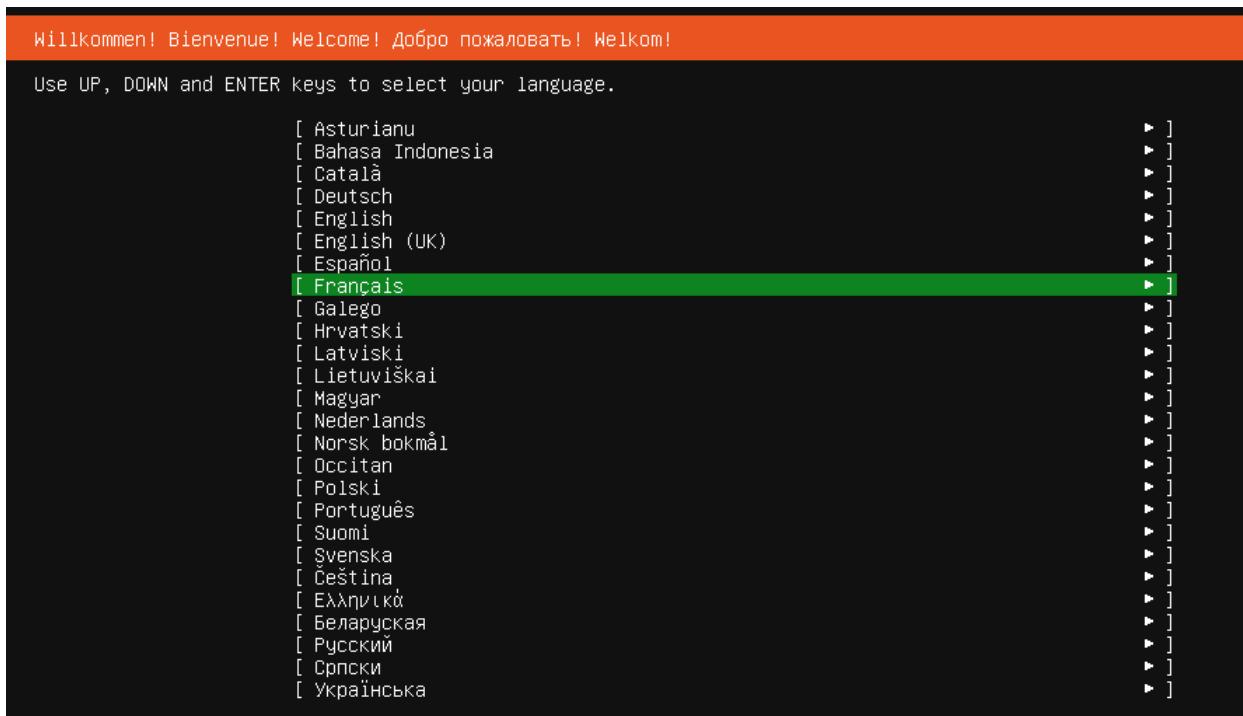
USB Controller: OHCI, EHCI
Device Filters: 0 (0 active)

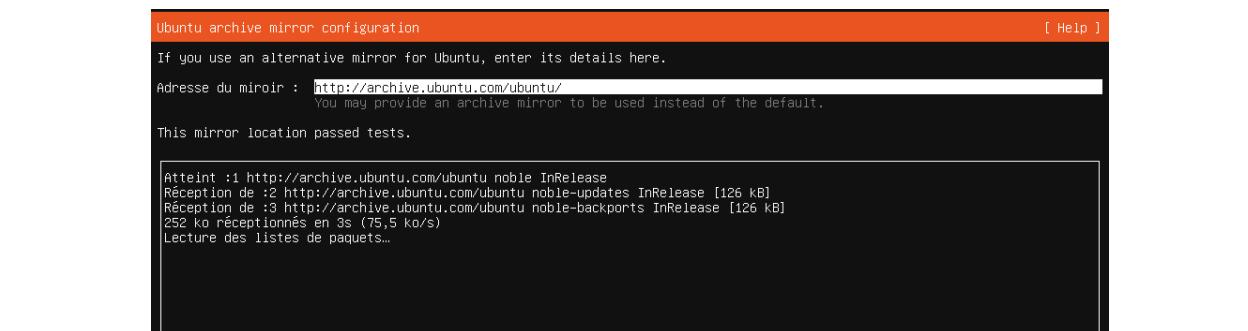
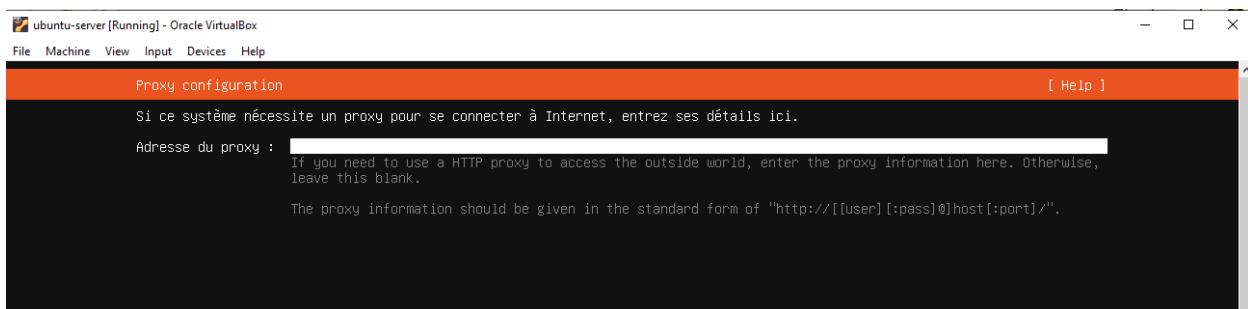
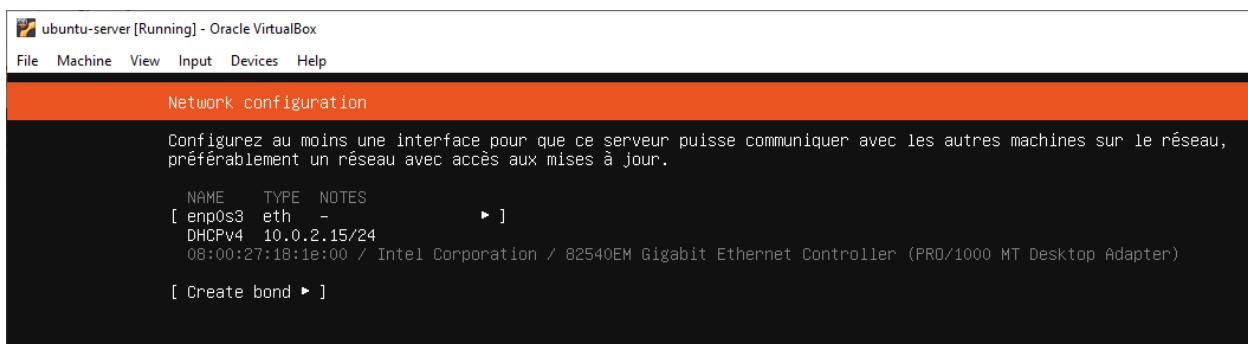
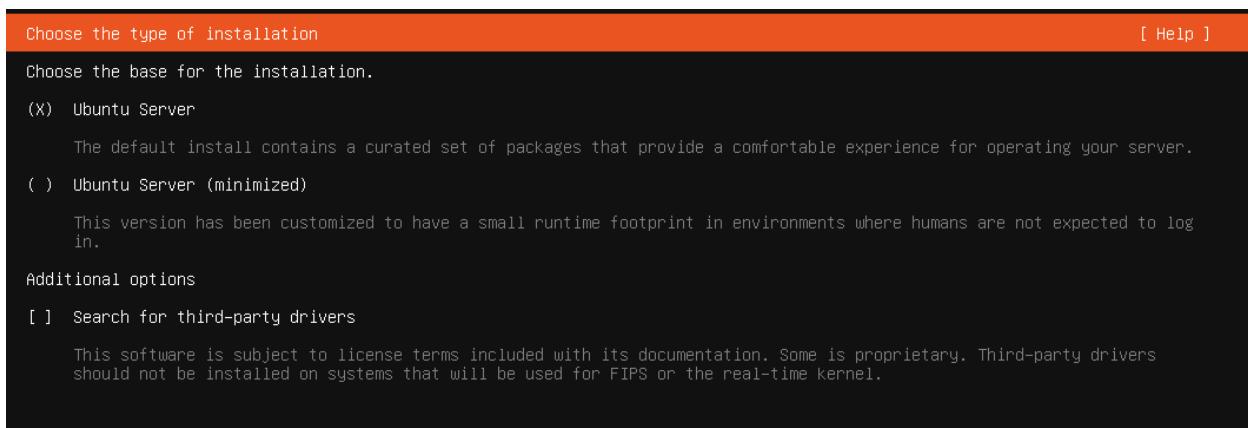
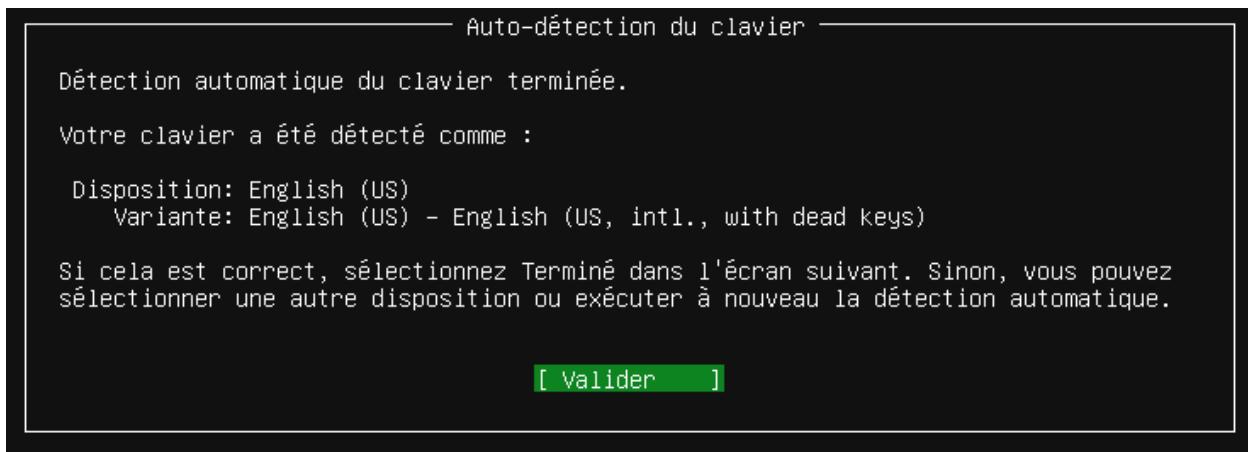
Shared folders

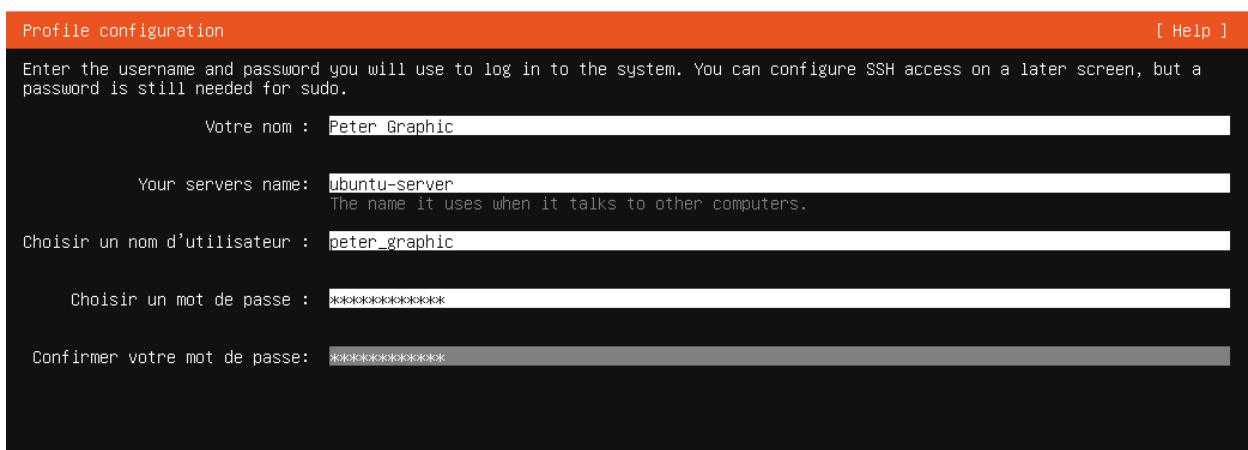
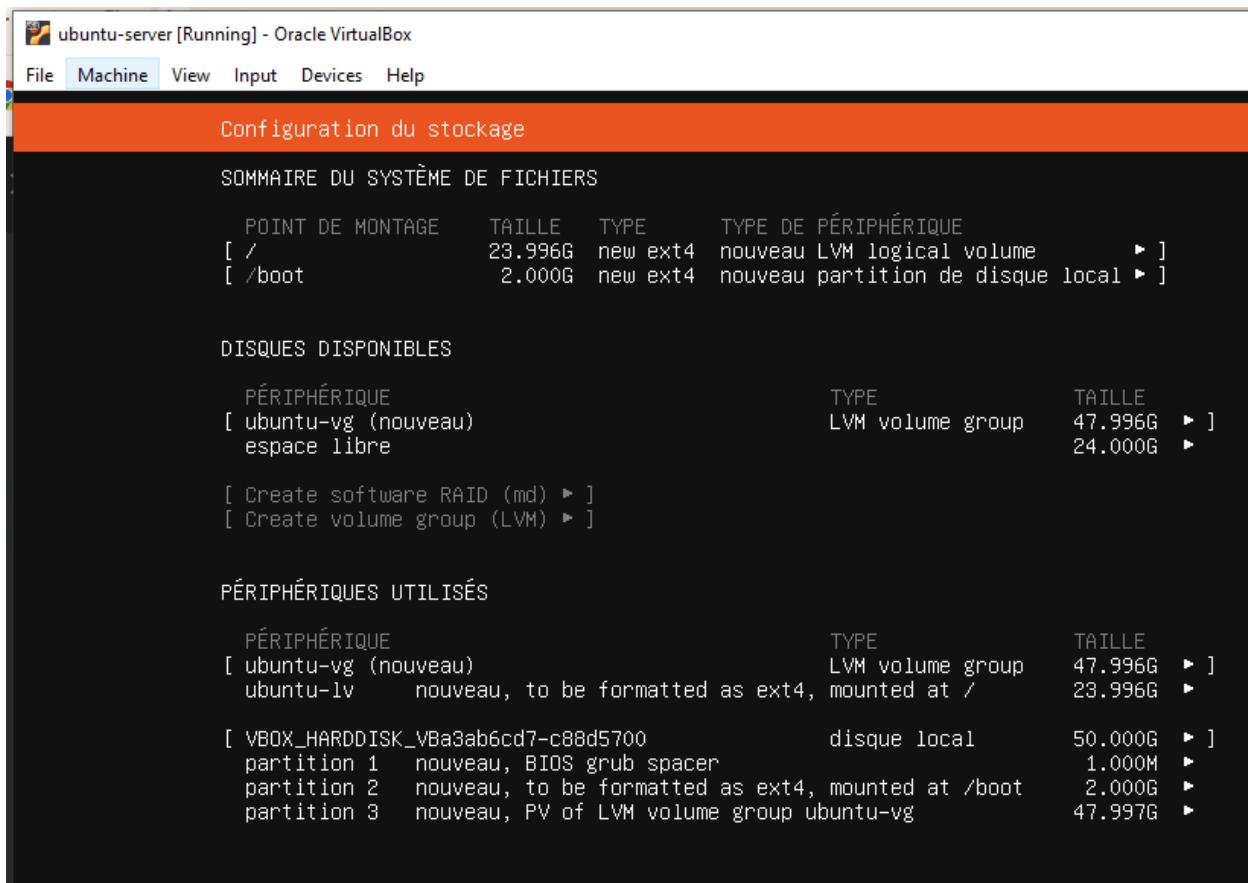
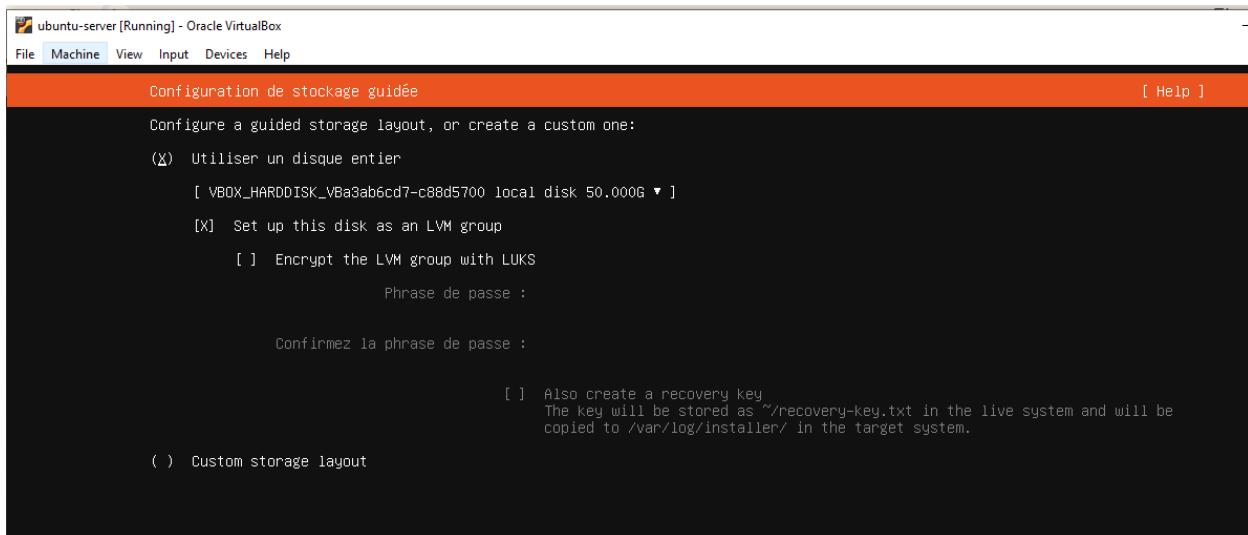
None

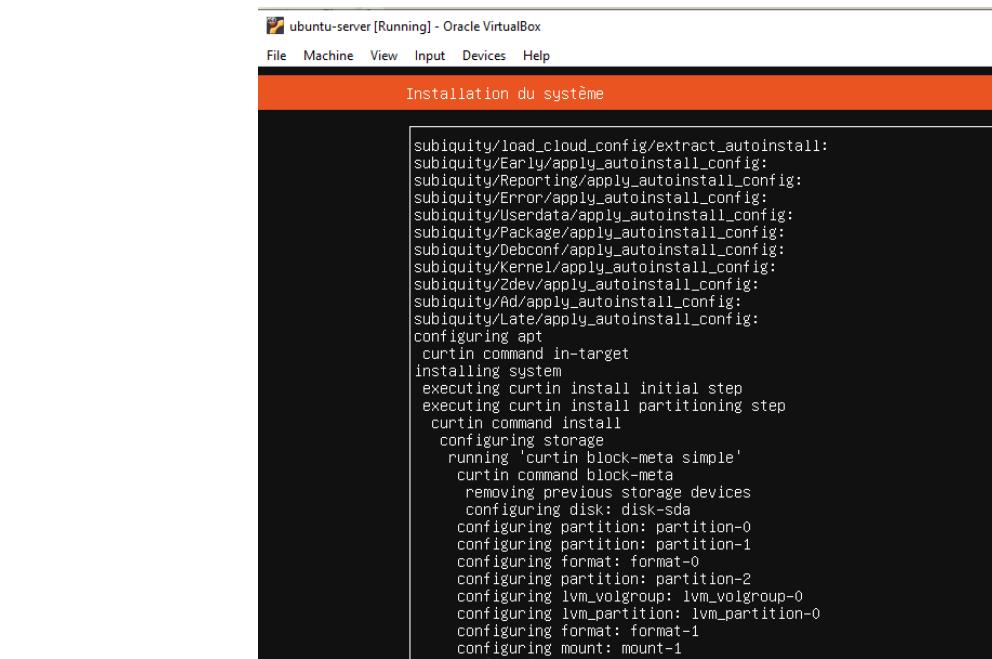
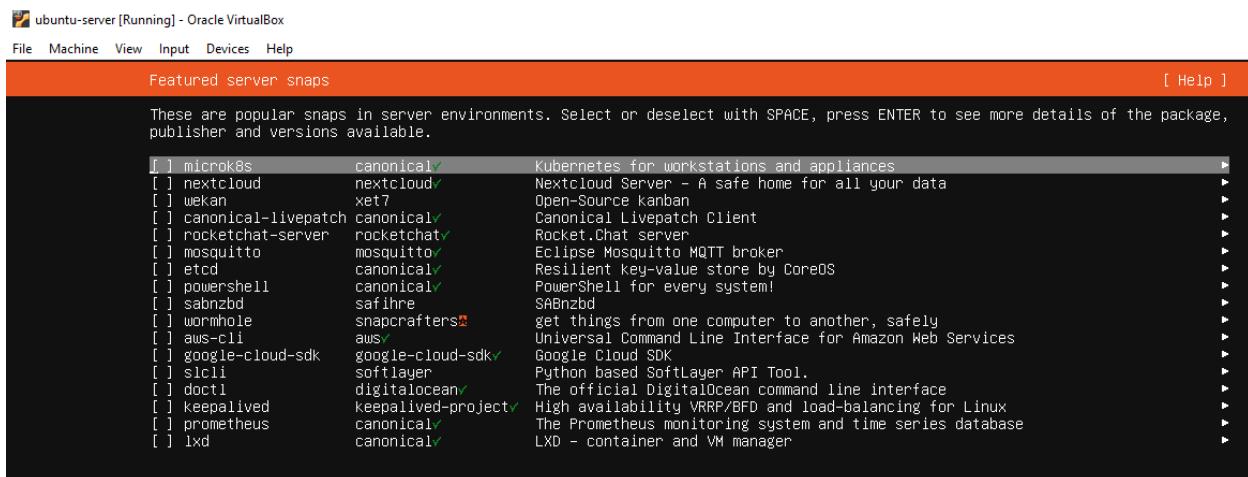
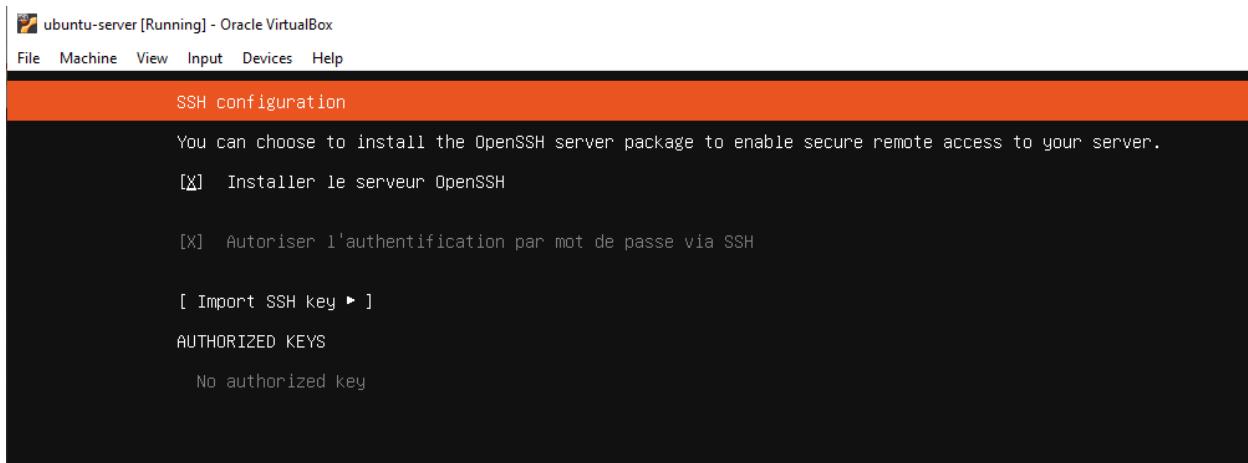
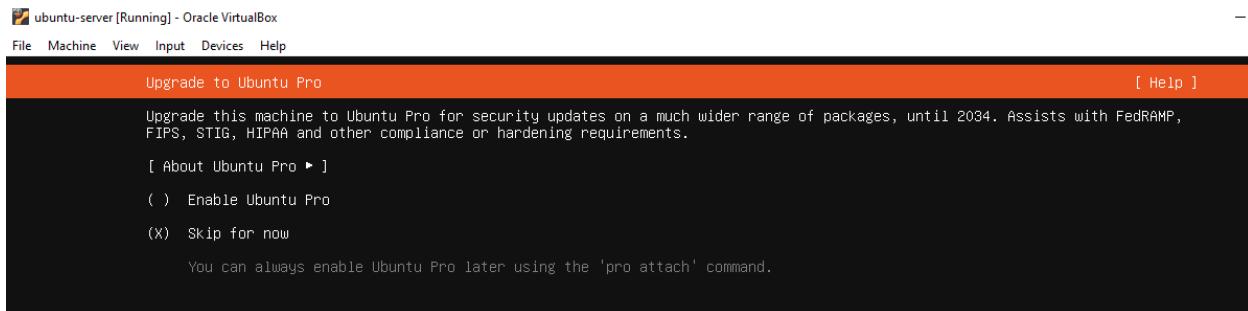
Description

2. Installation d'Ubuntu Server









ubuntu-server [Running] - Oracle VirtualBox

File Machine View Input Devices Help

```
configuring apt configuring apt
installing missing packages
Installing packages on target system: ['grub-pc']
configuring iscsi service
configuring raid (mdadm) service
configuring NVMe over TCP
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
copying metadata from /cdrom
final system configuration
calculating extra packages to install
installing openssh-server
retrieving openssh-server
curtin command system-install
unpacking openssh-server
curtin command system-install
configuring cloud-init
downloading and installing security updates
curtin command in-target
restoring apt configuration
curtin command in-target
subiquity/Late/run:
```

[View full log] [Redémarrer maintenant]

3. Vérification de la version :

```
peter_graphic@ubuntu-server:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 24.04.3 LTS
Release:        24.04
Codename:       noble
peter_graphic@ubuntu-server:~$ _
```

4. Vérification l'adresse IP :

```
peter_graphic@ubuntuserver:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue stat
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
        inet6 ::1/128 scope host noprefixroute
            valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc
    link/ether 00:0c:29:71:b9:ef brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.64.129/24 metric 100 brd 192.168.64.255 s
        valid_lft 1251sec preferred_lft 1251sec
        inet6 fe80::20c:29ff:fe71:b9ef/64 scope link
            valid_lft forever preferred_lft forever
peter_graphic@ubuntuserver:~$ _
```

5. Testez la connectivité Internet :

```
peter_graphic@ubuntuserver:~$ ping -c 4 google.com
ping: google.com: Temporary failure in name resolution
peter_graphic@ubuntuserver:~$ _
```

6. Mise à jour du système

```
peter_graphic@ubuntuserver:~$ sudo apt update
[sudo] password for peter_graphic:
Ign :1 http://security.ubuntu.com/ubuntu noble-security In
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRe
Ign :1 http://security.ubuntu.com/ubuntu noble-security In
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports In
Ign :1 http://security.ubuntu.com/ubuntu noble-security In
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Err :1 http://security.ubuntu.com/ubuntu noble-security In
    Erreur temporaire de résolution de « security.ubuntu.com
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRe
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports In
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRe
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports In
Err :2 http://archive.ubuntu.com/ubuntu noble InRelease
    Erreur temporaire de résolution de « archive.ubuntu.com
Err :3 http://archive.ubuntu.com/ubuntu noble-updates InRe
    Erreur temporaire de résolution de « archive.ubuntu.com
Err :4 http://archive.ubuntu.com/ubuntu noble-backports In
    Erreur temporaire de résolution de « archive.ubuntu.com
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
Tous les paquets sont à jour.
W: Impossible de récupérer http://archive.ubuntu.com/ubuntu/nob
W: Impossible de récupérer http://archive.ubuntu.com/ubuntu/nob
W: Impossible de récupérer http://archive.ubuntu.com/ubuntu/nob
W: Impossible de récupérer http://security.ubuntu.com/ubuntu/nob
W: Le téléchargement de quelques fichiers d'index a échoué
```

```
peter_graphic@ubuntuserver:~$ sudo apt upgrade -y
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
Calcul de la mise à jour... Fait
0 mis à jour, 0 nouvellement installés, 0 à enlever et 0 r
peter_graphic@ubuntuserver:~$
```

7. Installation d'outils de base

```
peter_graphic@ubuntuserver:~$ sudo apt install openssh-server
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
openSSH-server est déjà la version la plus récente (1:9.6p1-0ubuntu1).
0 mis à jour, 0 nouvellement installés, 0 à enlever et 0 non
peter_graphic@ubuntuserver:~$
```

```
peter_graphic@ubuntuserver:~$ sudo systemctl enable ssh
Synchronizing state of ssh.service with SysV service script files...
Executing: /usr/lib/systemd/systemd-sysv-install enable ssh
Created symlink /etc/systemd/system/multi-user.target.wants/ssh.service → /usr/lib/
Created symlink /etc/systemd/system/multi-user.target.wants/ssh.service → /usr/lib/
peter_graphic@ubuntuserver:~$
```

```
peter_graphic@ubuntuserver:~$ sudo systemctl start ssh
peter_graphic@ubuntuserver:~$
```

```
< >
peter_graphic@ubuntuserver:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/usr/lib/systemd/system/ssh.service);
  Active: active (running) since Thu 2025-11-20 00:45:06 UTC
    TriggeredBy: ● ssh.socket
    Docs: man:sshd(8)
           man:sshd_config(5)
  Process: 1880 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0)
  Main PID: 1881 (sshd)
    Tasks: 1 (limit: 4548)
   Memory: 2.1M (peak: 2.2M)
      CPU: 120ms
     CGroup: /system.slice/ssh.service
             └─1881 "sshd: /usr/sbin/sshd -D [listener] 0

nov. 20 00:45:06 ubuntuserver systemd[1]: Starting ssh.service...
nov. 20 00:45:06 ubuntuserver sshd[1881]: Server listening on 0.0.0.0 port 22#
nov. 20 00:45:06 ubuntuserver sshd[1881]: Server listening on :: port 22#
nov. 20 00:45:06 ubuntuserver systemd[1]: Started ssh.service.
peter_graphic@ubuntuserver:~$
```

```
< >
peter_graphic@ubuntuserver:~$ df -h
Filesystem              Size  Used Avail Use% M/
tmpfs                  387M  1,6M  386M  1% /
/dev/mapper/ubuntu--vg-ubuntu--lv  24G  6,3G  17G  29% /
tmpfs                  1,9G    0  1,9G  0% /
tmpfs                  5,0M    0  5,0M  0% /
/dev/sda2                2,0G 100M  1,7G  6% /
tmpfs                  387M   12K  387M  1% /
peter_graphic@ubuntuserver:~$
```

```
< >
peter_graphic@ubuntuserver:~$ free -h
total        used        free        shared
Mem:       3,8Gi      478Mi      3,0Gi      1,5Mi
Swap:      3,8Gi          0B      3,8Gi
peter_graphic@ubuntuserver:~$
```

8. Connexion SSH depuis la machine hôte

```
PS C:\Users\DOUDA SAT> ping 192.168.64.129
Pinging 192.168.64.129 with 32 bytes of data:
Reply from 192.168.64.129: bytes=32 time<1ms TTL=64
Reply from 192.168.64.129: bytes=32 time=1ms TTL=64
Reply from 192.168.64.129: bytes=32 time<1ms TTL=64
Reply from 192.168.64.129: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.64.129:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
PS C:\Users\DOUDA SAT> ssh peter_graphic@192.168.64.129
The authenticity of host '192.168.64.129 (192.168.64.129)' can't be established.
ED25519 key fingerprint is SHA256:VqhBUw4USBaR1EpcC9UVrVALL6h/sEUiywvEA5zNnYY.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.64.129' (ED25519) to the list of known hosts.
peter_graphic@192.168.64.129's password:
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.8.0-71-generic x86_64)

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

System information as of jeu. 20 nov. 2025 01:25:56 UTC

System load: 0.09           Memory usage: 8%   Processes:      215
Usage of /: 26.6% of 23.45GB Swap usage: 0%   Users logged in: 1

La maintenance de sécurité étendue pour Applications n'est pas activée.

0 mise à jour peut être appliquée immédiatement.

Activez ESM Apps pour recevoir des futures mises à jour de sécurité supplémentaires.
Visitez https://ubuntu.com/esm ou exécutez : sudo pro status

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or try again later.

peter_graphic@ubuntuserver:~$
```

CONCLUSION :

Malgré les difficultés pour l'installation du serveur sur mon PC mais J'ai appris les compétences nécessaires pour installer et configurer un server Ubuntu.