



**IUS**  
INSTITUT  
UNIVERSITAIRE  
DES SCIENCES

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

**Quatrième année**

**RAPPORT**

**Sur le Travail de Laboratoire N° 2**

**COURS**

**Administration Système 1**

**Professeur**

**Ismael SAINT AMOUR**

**PRÉPARÉ PAR**

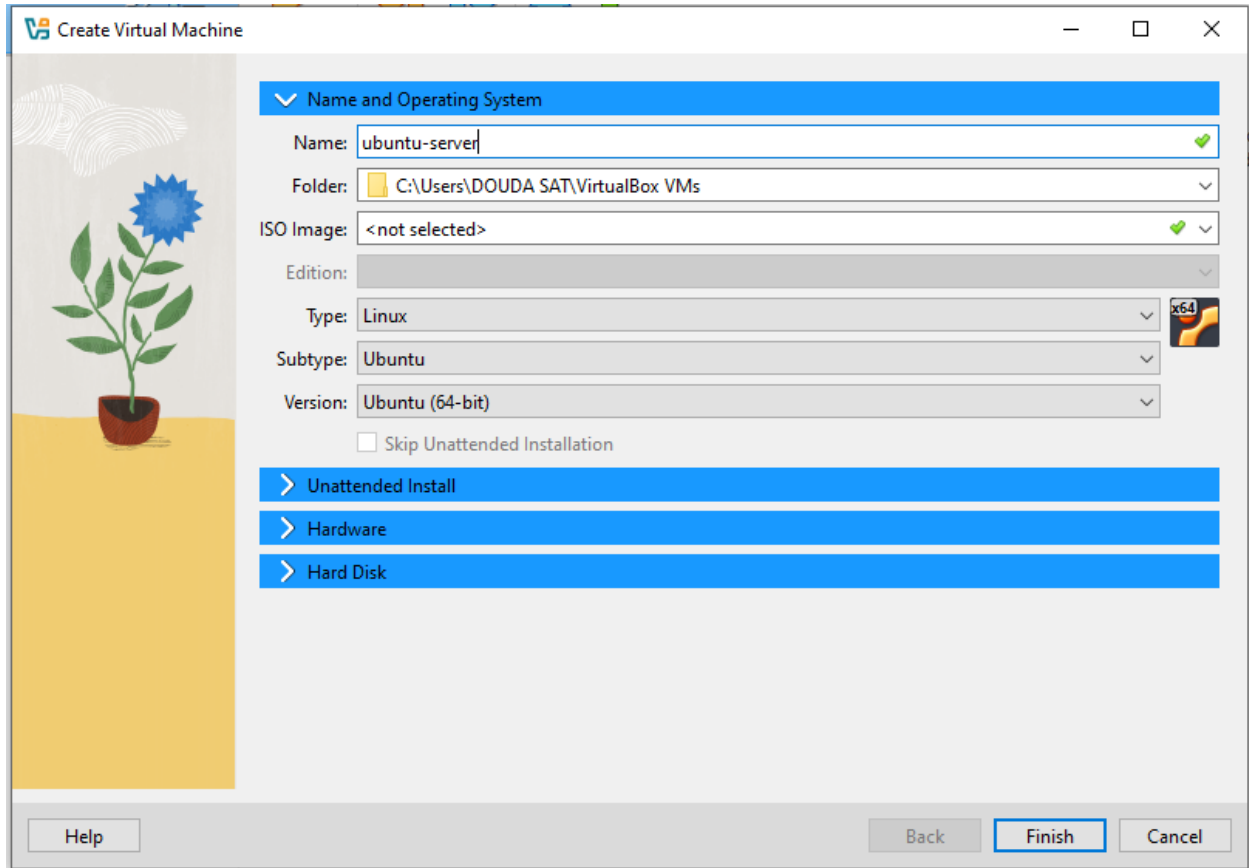
**Peterson CHERY**

**SEMESTRE**

**I**

**Le 07/11/2025**

## 1. Création de la Machine Virtuelle sur VirtualBox



Create Virtual Machine

▼ Name and Operating System

Name:

Folder:

ISO Image:

Edition:

Type:

Subtype:

Version:

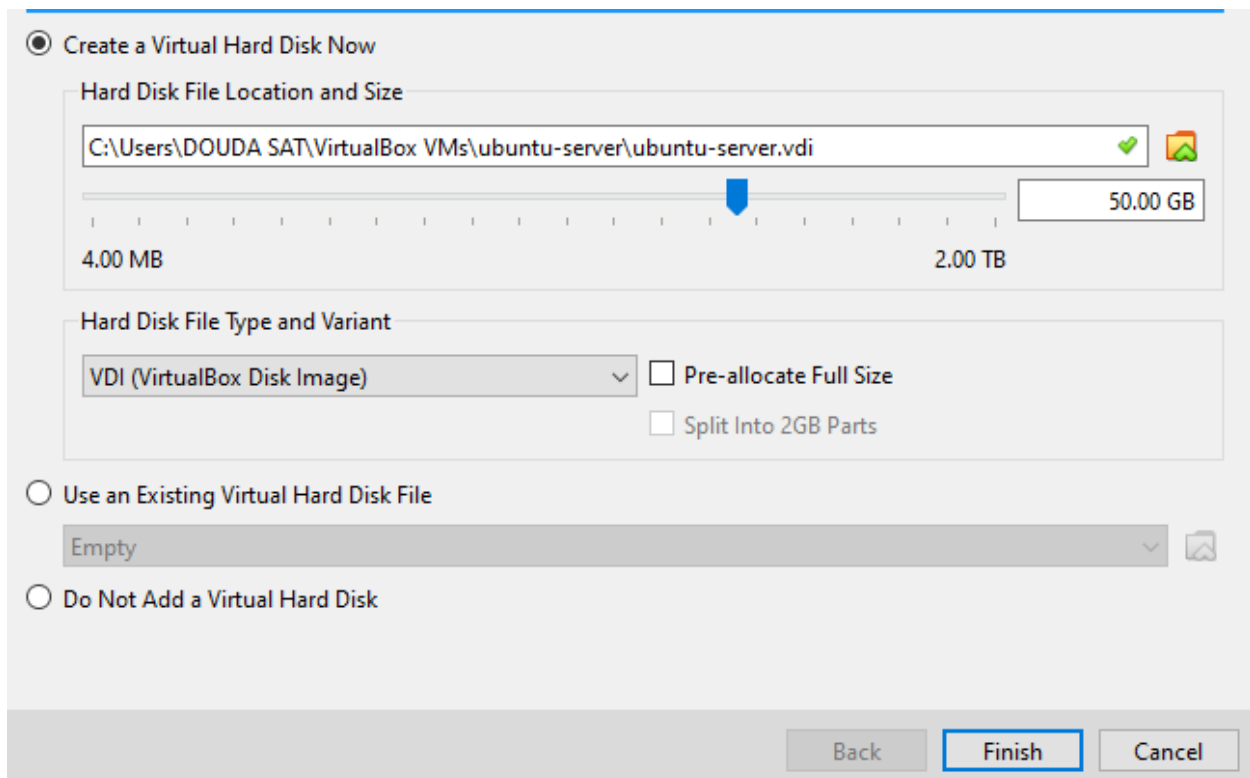
☐ Skip Unattended Installation

> Unattended Install

> Hardware

> Hard Disk

Help Back Finish Cancel



☒ Create a Virtual Hard Disk Now

Hard Disk File Location and Size

50.00 GB

4.00 MB 2.00 TB

Hard Disk File Type and Variant

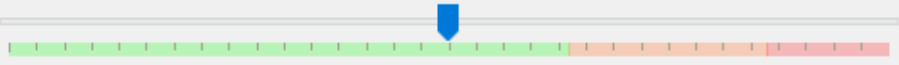
☐ Pre-allocate Full Size

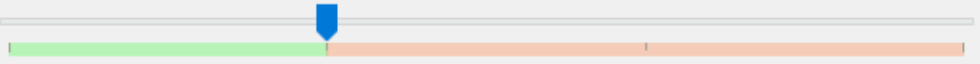
☐ Split Into 2GB Parts

☐ Use an Existing Virtual Hard Disk File

☐ Do Not Add a Virtual Hard Disk

Back Finish Cancel

Base Memory:  4096 MB

Processors:  2

☐ Enable EFI (special OSes only)


> Hard Disk

### Storage

**Devices**

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

**Attributes**

Optical Drive: IDE Secondary Device 

☐ Live CD/DVD






**Information**

Type: Image

Size: 3.08 GB

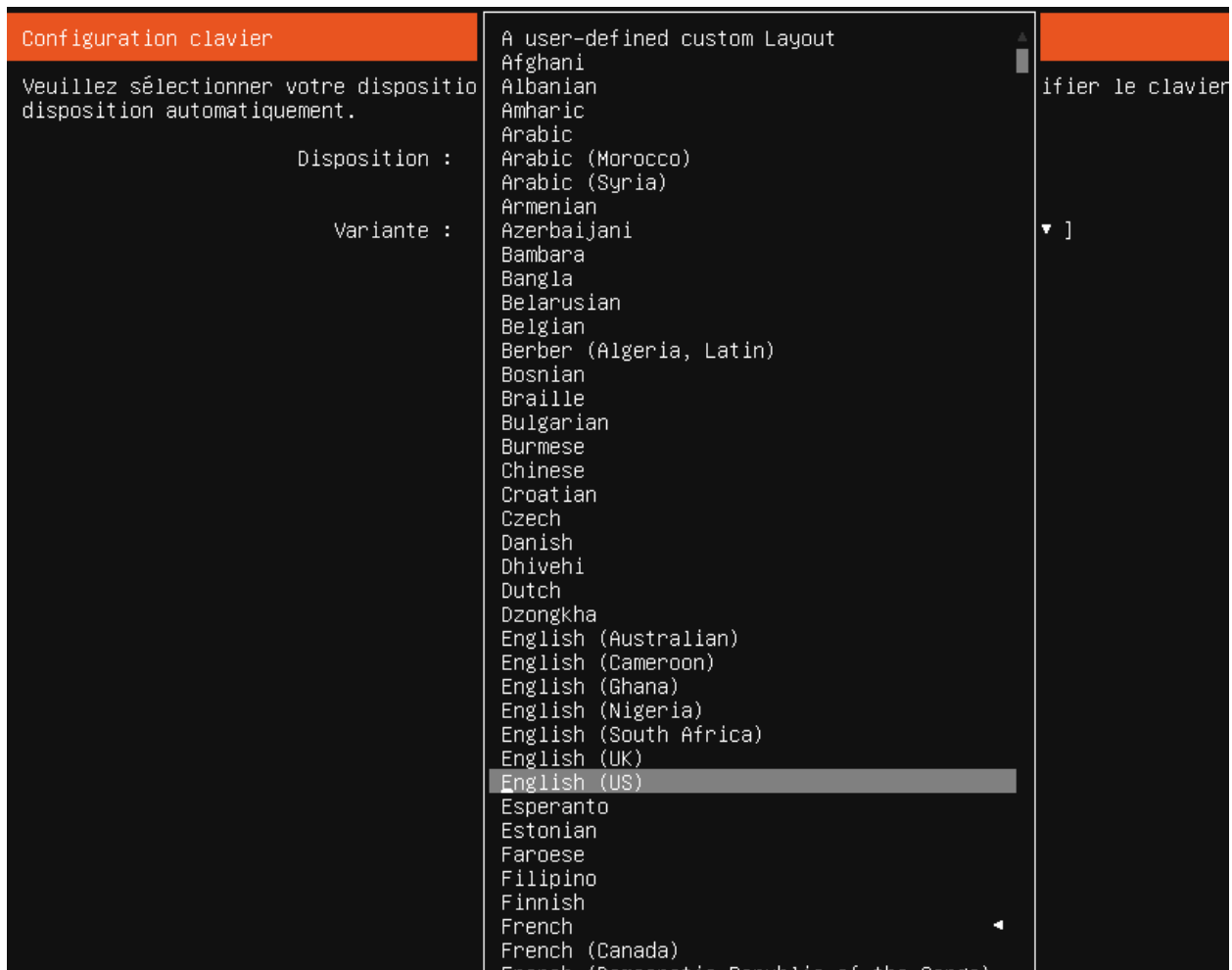
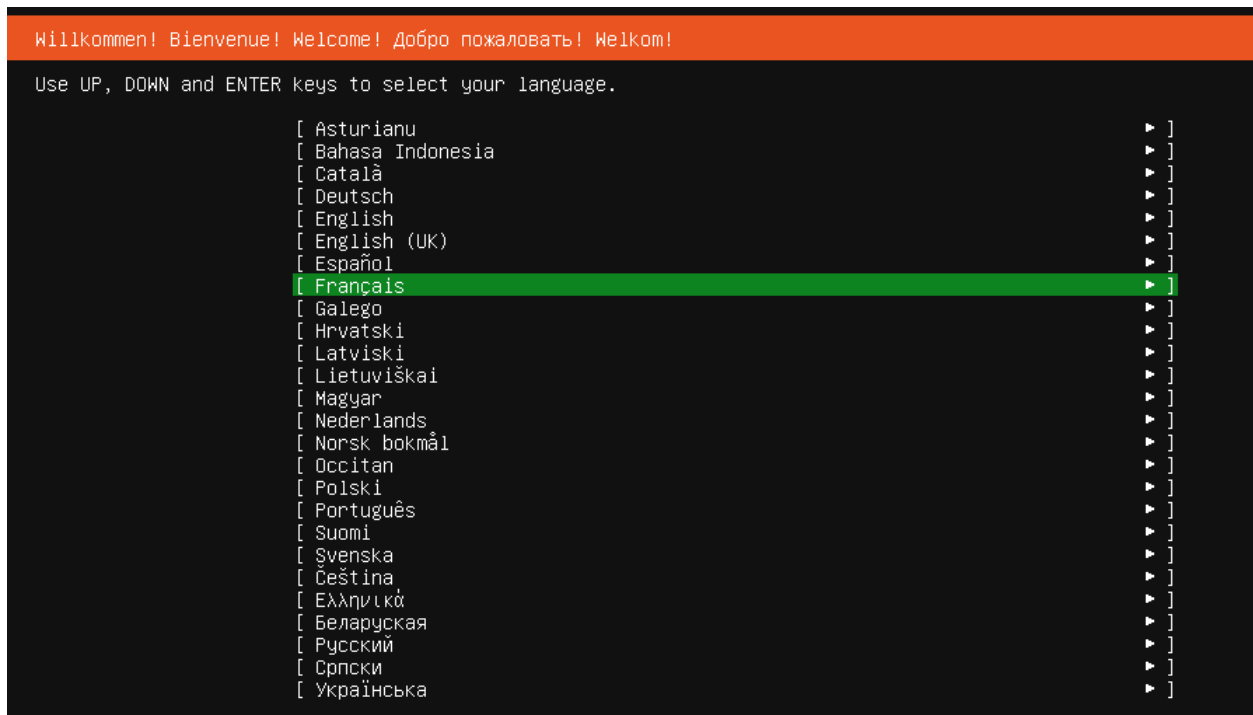
Location: C:\Users\DOUDA SAT\Downlo..

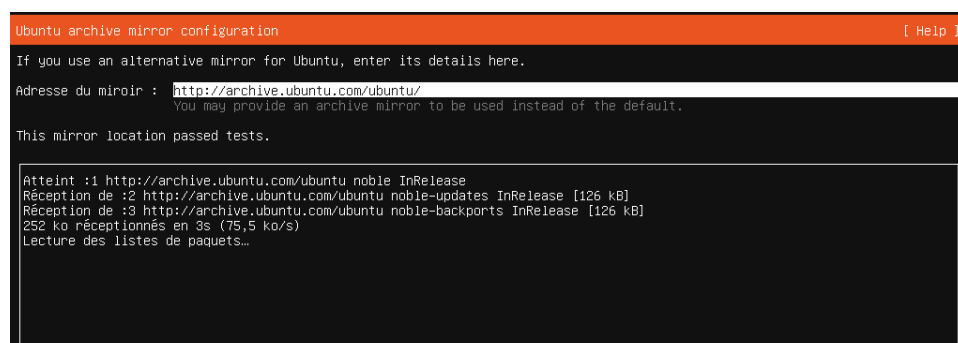
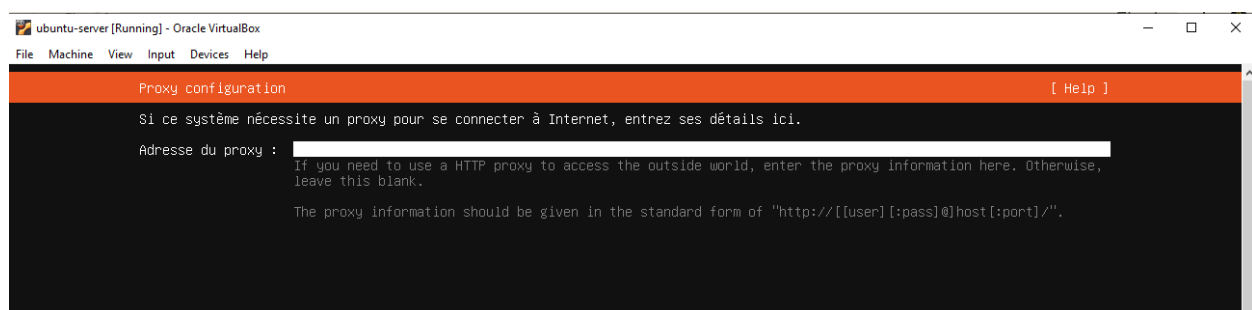
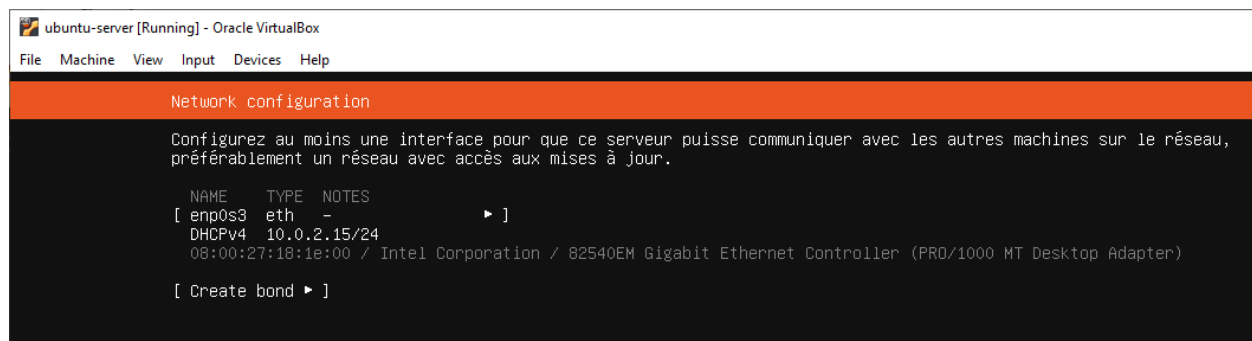
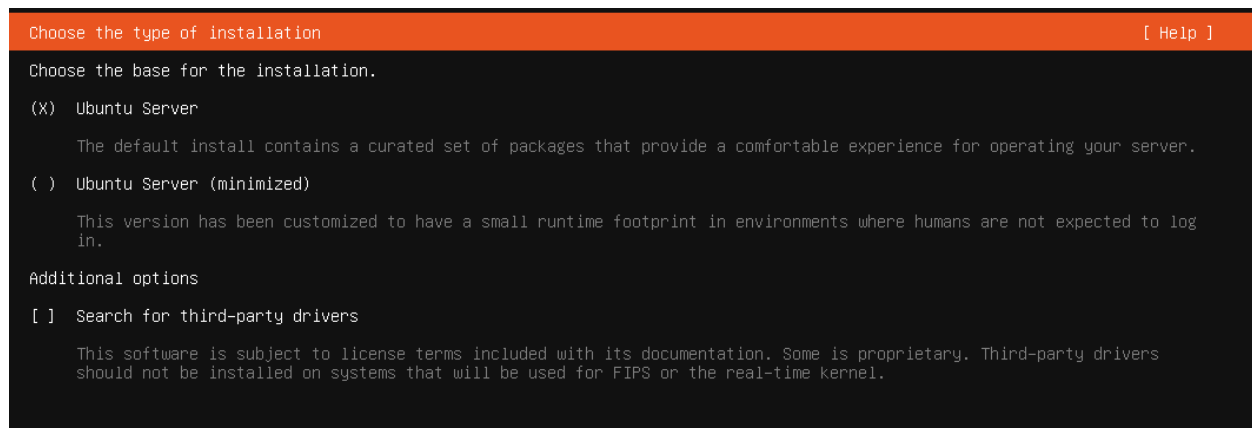
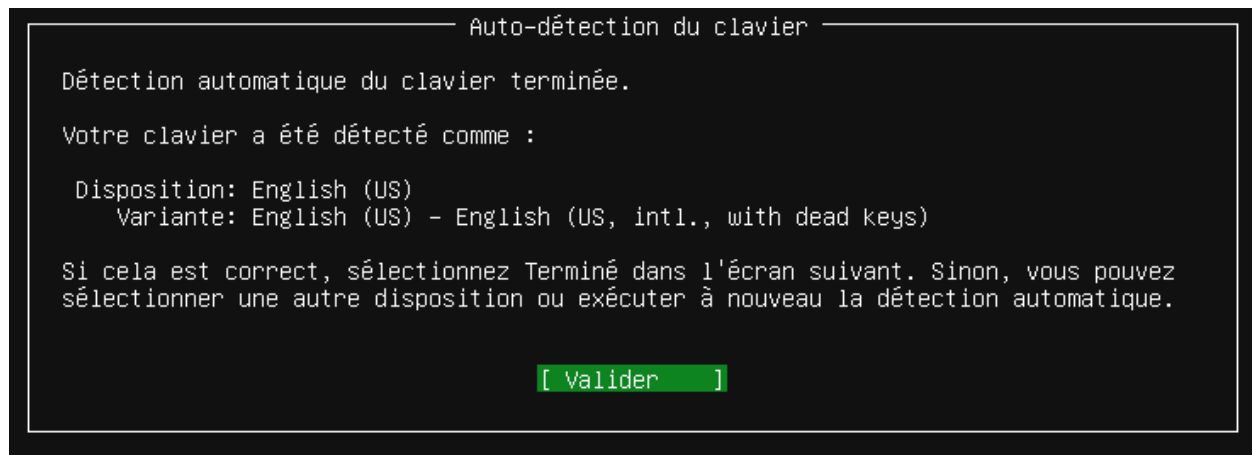
Attached to: ubuntu-server

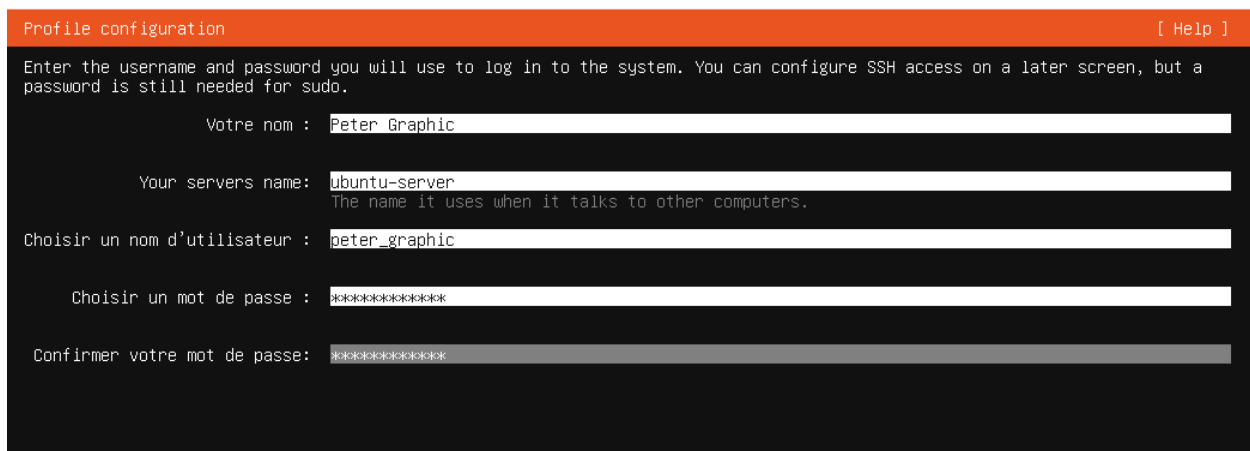
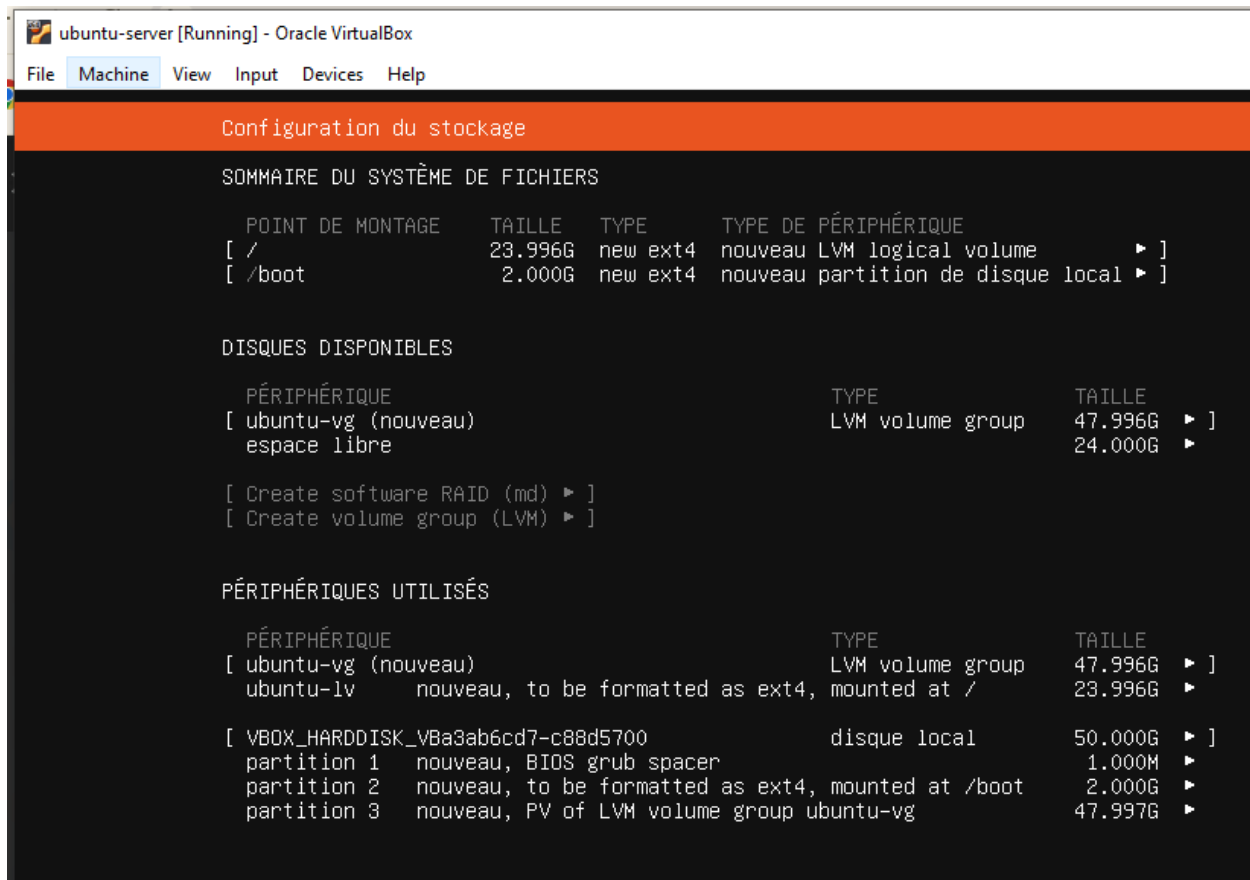
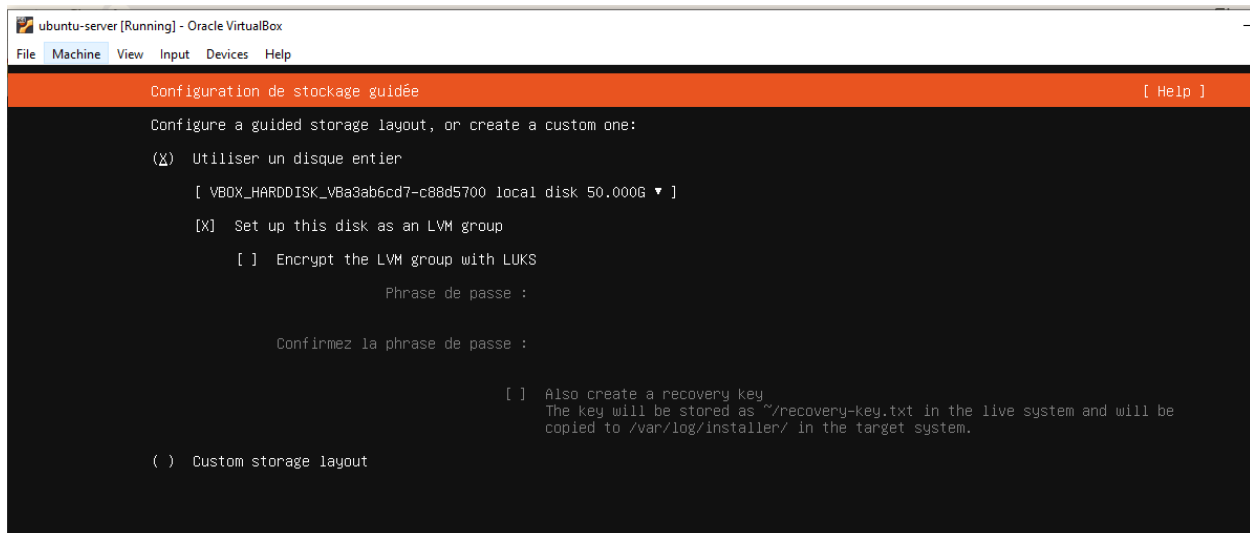






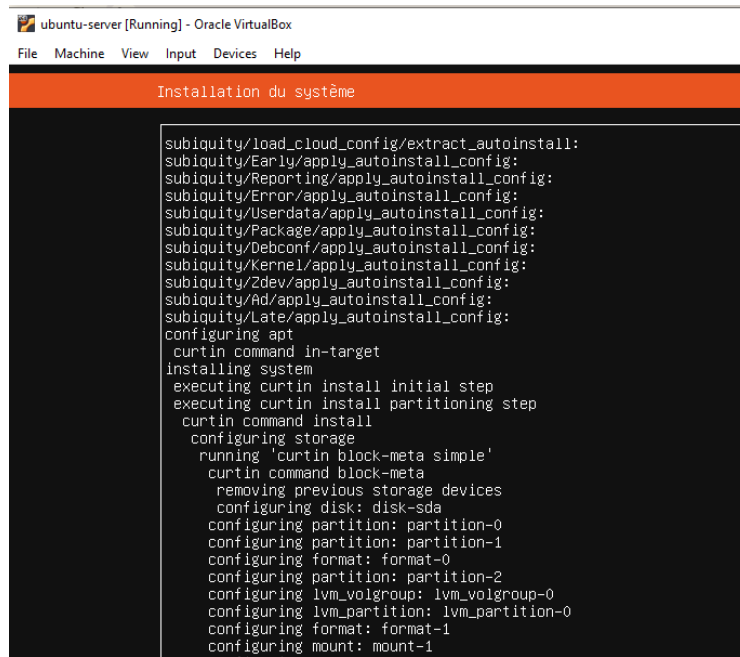
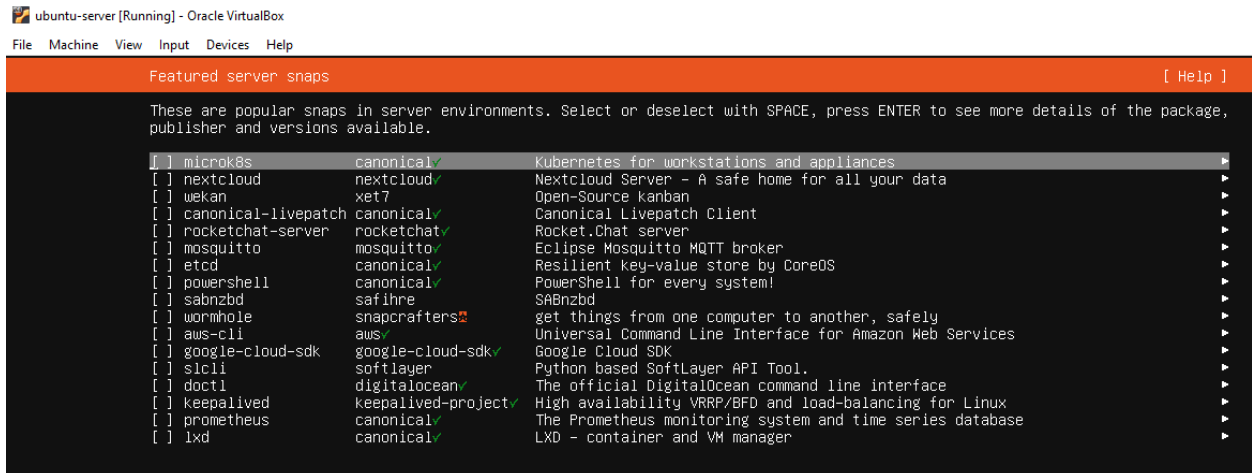
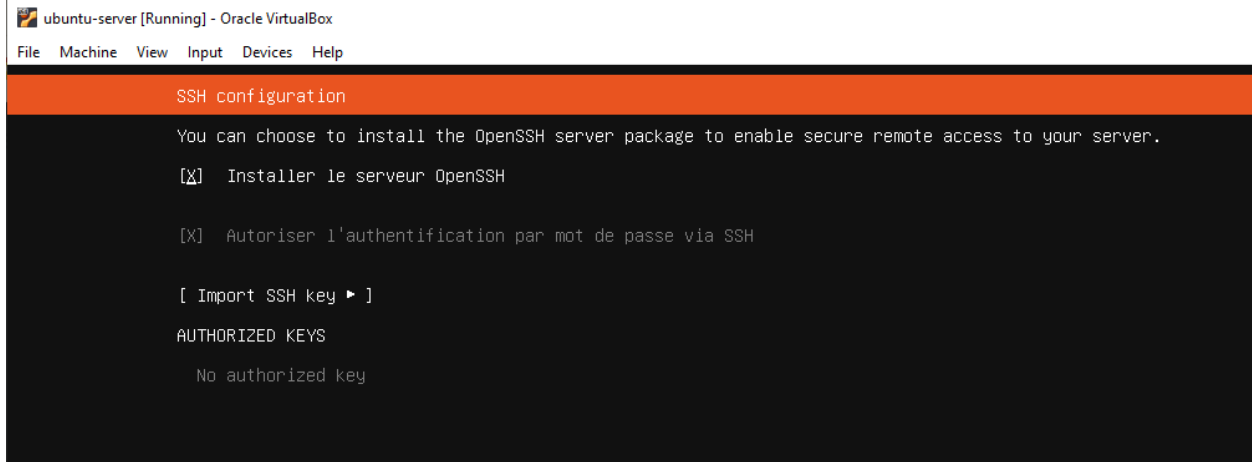
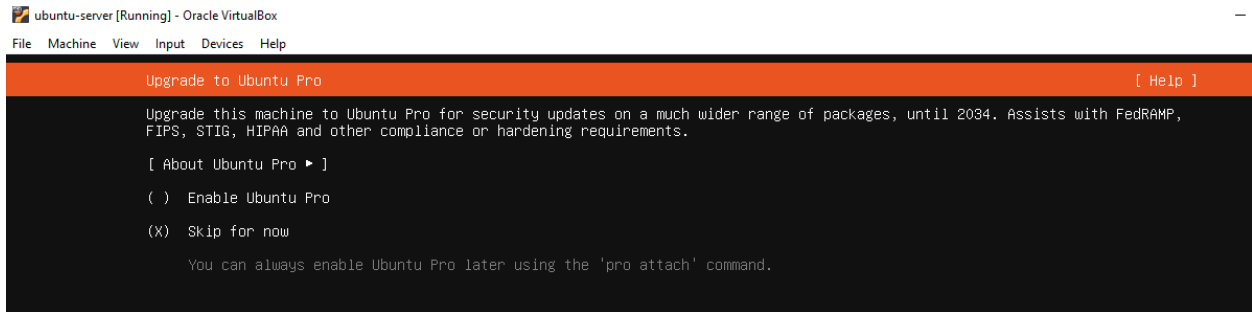
<b>General</b>	
Name:	ubuntu-server
Operating System:	Ubuntu (64-bit)
<b>System</b>	
Base Memory:	4096 MB
Processors:	2
Boot Order:	Floppy, Optical, Hard Disk
Acceleration:	Nested Paging, KVM Paravirtualization
<b>Display</b>	
Video Memory:	16 MB
Graphics Controller:	VMSVGA
Remote Desktop Server:	Disabled
Recording:	Disabled
<b>Storage</b>	
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)
<b>Audio</b>	
Host Driver:	Default
Controller:	ICH AC97
<b>Network</b>	
Adapter 1:	Intel PRO/1000 MT Desktop (NAT)
<b>USB</b>	
USB Controller:	OHCI, EHCI
Device Filters:	0 (0 active)
<b>Shared folders</b>	
None	
<b>Description</b>	

## 2. Installation d'Ubuntu Server









```

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 InRelease
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Ign :1 http://security.ubuntu.com/ubuntu noble-security InRelease
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Ign :1 http://security.ubuntu.com/ubuntu noble-security InRelease
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Err :1 http://security.ubuntu.com/ubuntu noble-security InRelease
      Erreur temporaire de résolution de « security.ubuntu.com »
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Ign :2 http://archive.ubuntu.com/ubuntu noble InRelease
Ign :3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Ign :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
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 InRelease
      Erreur temporaire de résolution de « archive.ubuntu.com »
Err :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
      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
W: Impossible de récupérer http://archive.ubuntu.com/ubuntu
W: Impossible de récupérer http://archive.ubuntu.com/ubuntu
W: Impossible de récupérer http://security.ubuntu.com/ubuntu
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 non classés
peter_graphic@ubuntuserver:~$
```

## 7. Installation d'outils de base

```
peter_graphic@ubuntuuser:~$ 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 (1:9.6p
0 mis à jour, 0 nouvellement installés, 0 à enlever et 0 n
peter_graphic@ubuntuuser:~$
```

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

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

```
peter_graphic@ubuntuuser:~$ 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
  TriggeredBy: • ssh.socket
  Docs: man:sshd(8)
        man:sshd_config(5)
  Process: 1880 ExecStartPre=/usr/sbin/sshd -t (code=exi
  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 ubuntuuser systemd[1]: Starting ssh.serv
nov. 20 00:45:06 ubuntuuser sshd[1881]: Server listening
nov. 20 00:45:06 ubuntuuser sshd[1881]: Server listening
nov. 20 00:45:06 ubuntuuser systemd[1]: Started ssh.serv
peter_graphic@ubuntuuser:~$
```

```
peter_graphic@ubuntuuser:~$ df -h
Filesystem      Size  Used Avail Use% M
tmpfs            387M  1,6M  386M   1% /
/dev/mapper/ubun-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@ubuntuuser:~$
```

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

## 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.

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.