

**INSTITUT UNIVERSITAIRE DES SCIENCES
(IUS)**

Faculté des Sciences Technologies

TD No 2 – Système

Devoir rédigé par: Julien FRANCOIS

Etudiant en L3

Soumis au professeur: Ismael SAINT AMOUR

Date : 7 novembre 2025

Virtualisation d'Ubuntu sous VirtualBox

L'objectif de ce TD est de:

1. Comprendre le principe de la virtualisation.
2. Installer une machine virtuelle (VM) Ubuntu sous VirtualBox.
3. Configurer les ressources matérielles et le réseau de la VM.
4. Démarrer, utiliser et gérer la VM.

1. Comprendre le principe de la virtualisation.

La virtualisation est une technologie qui permet de créer plusieurs environnements simulés ou ressources spécialisées à partir d'un seul système physique. Son logiciel, appelé hyperviseur, est directement relié au matériel et permet de fragmenter ce système unique en plusieurs environnements distincts. C'est ce que l'on appelle les machines virtuelles. Ces dernières exploitent la capacité de l'hyperviseur à séparer les ressources du matériel et à les distribuer convenablement.

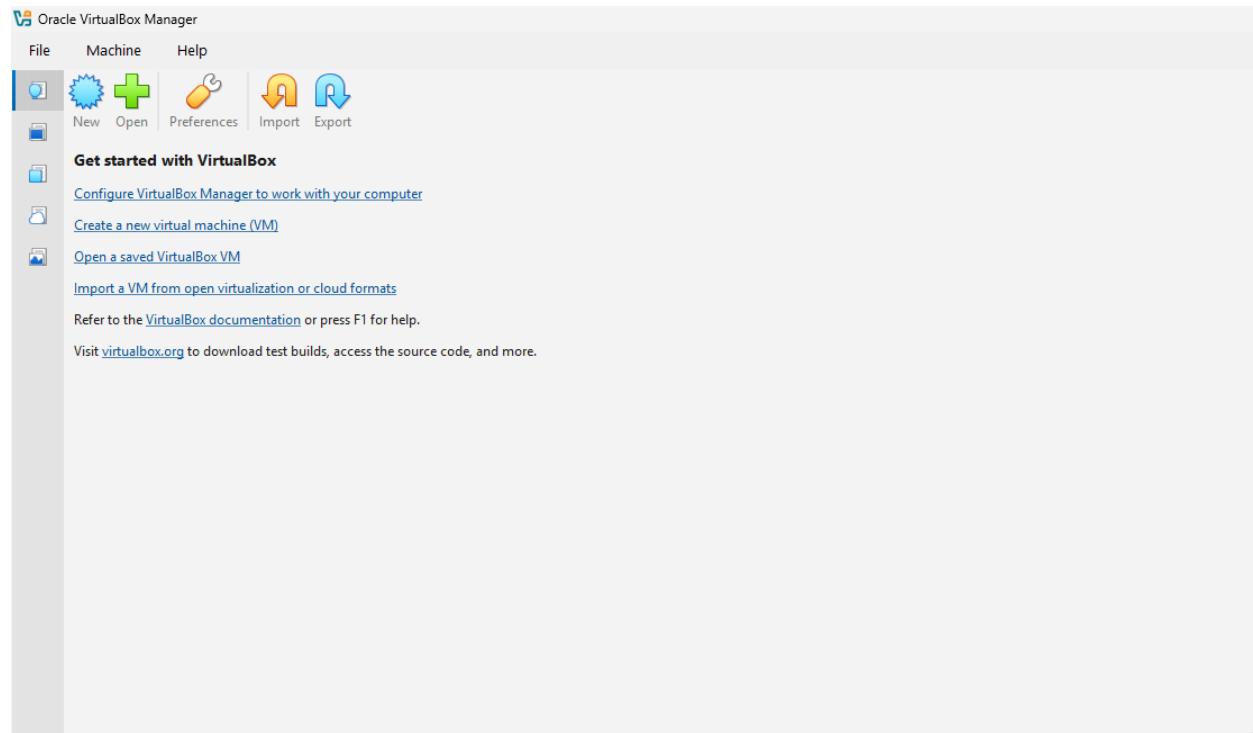
2. Installer une machine virtuelle (VM) Ubuntu sous VirtualBox.

Pour cette étape on doit commencer par télécharger VirtualBox sur

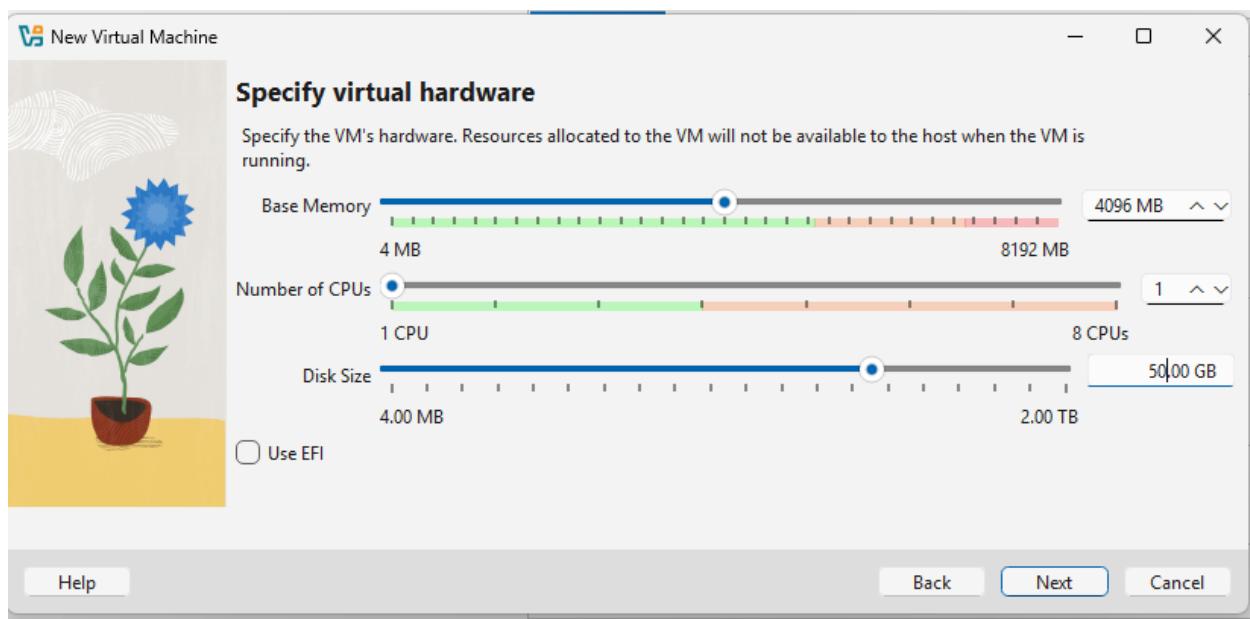
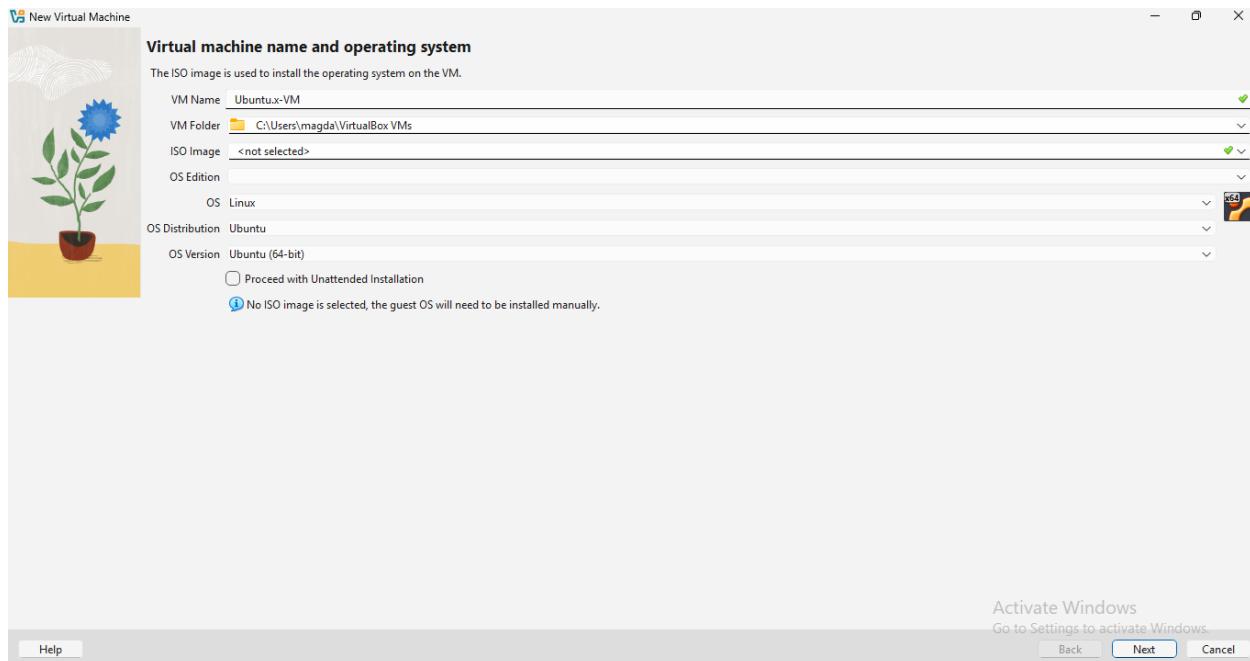
<https://www.virtualbox.org/wiki/Downloads> et procéder à l'installation sur le PC, en cas de problème avec l'installation on doit installer Microsoft virtual studio c ++ 2019 . Une fois les deux applications installées on pourra travailler en installant Ubuntu et la configurer sur VirtualBox

Les étapes :

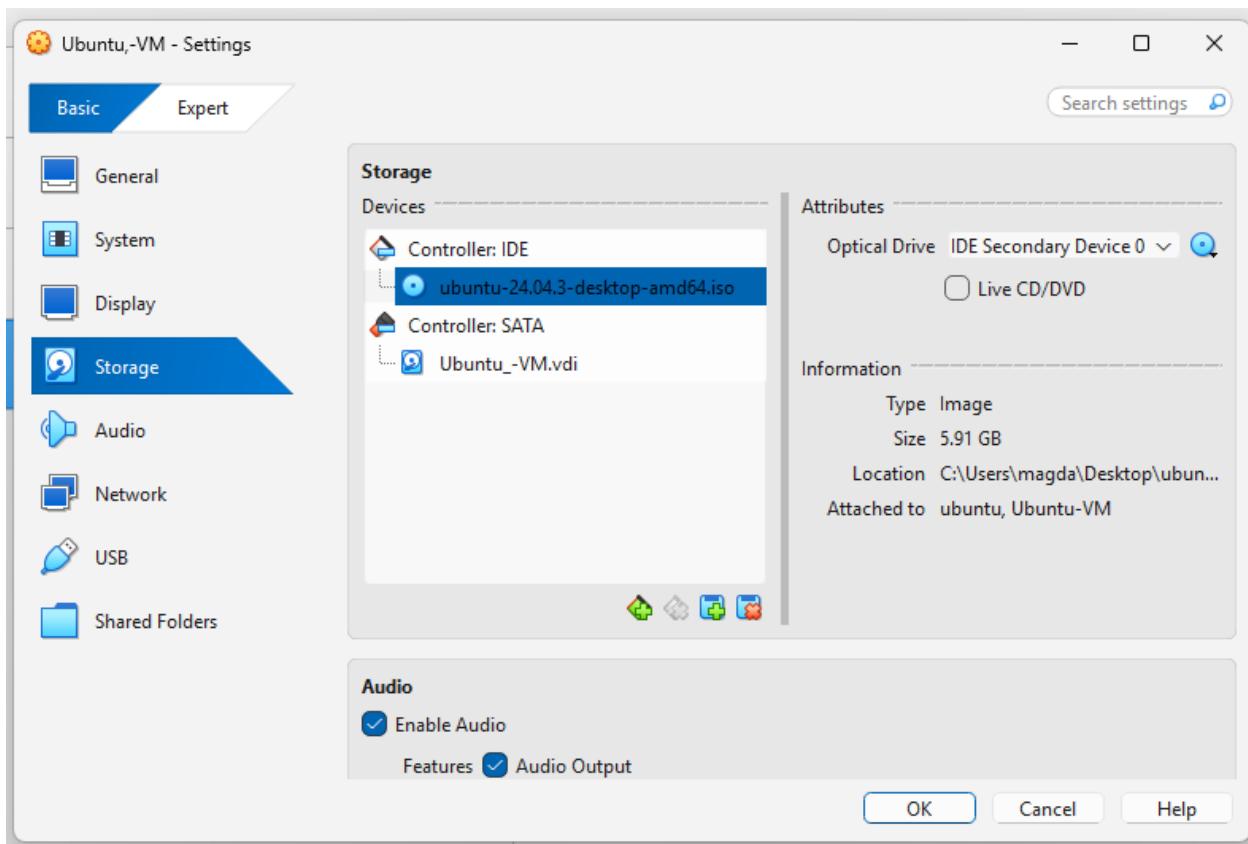
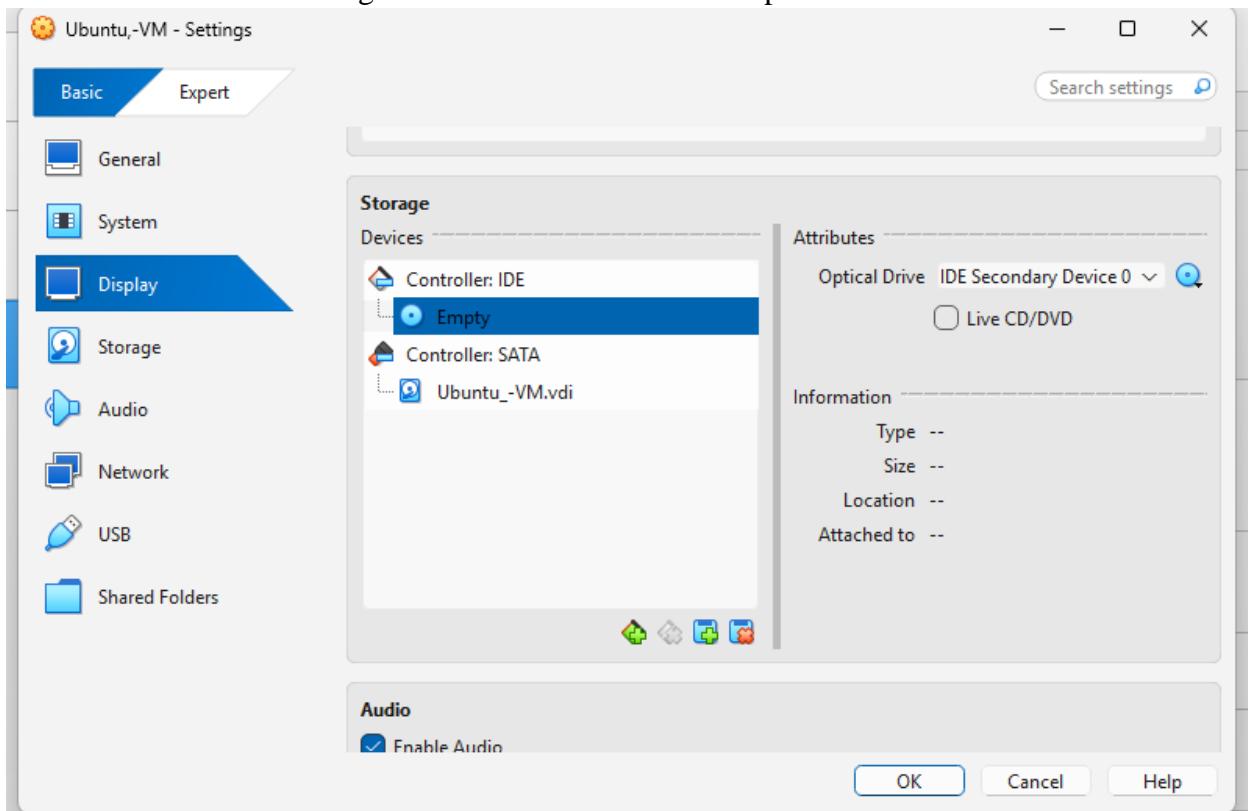
Installation de VirtualBox

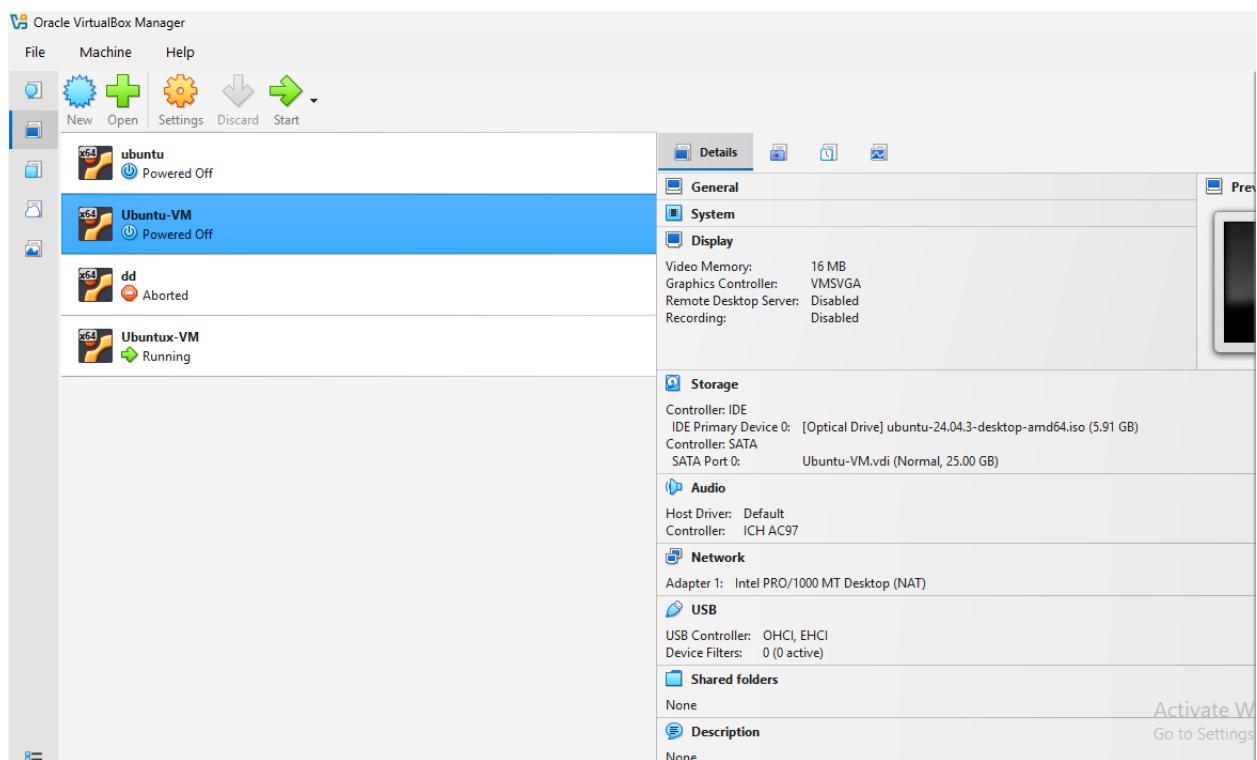
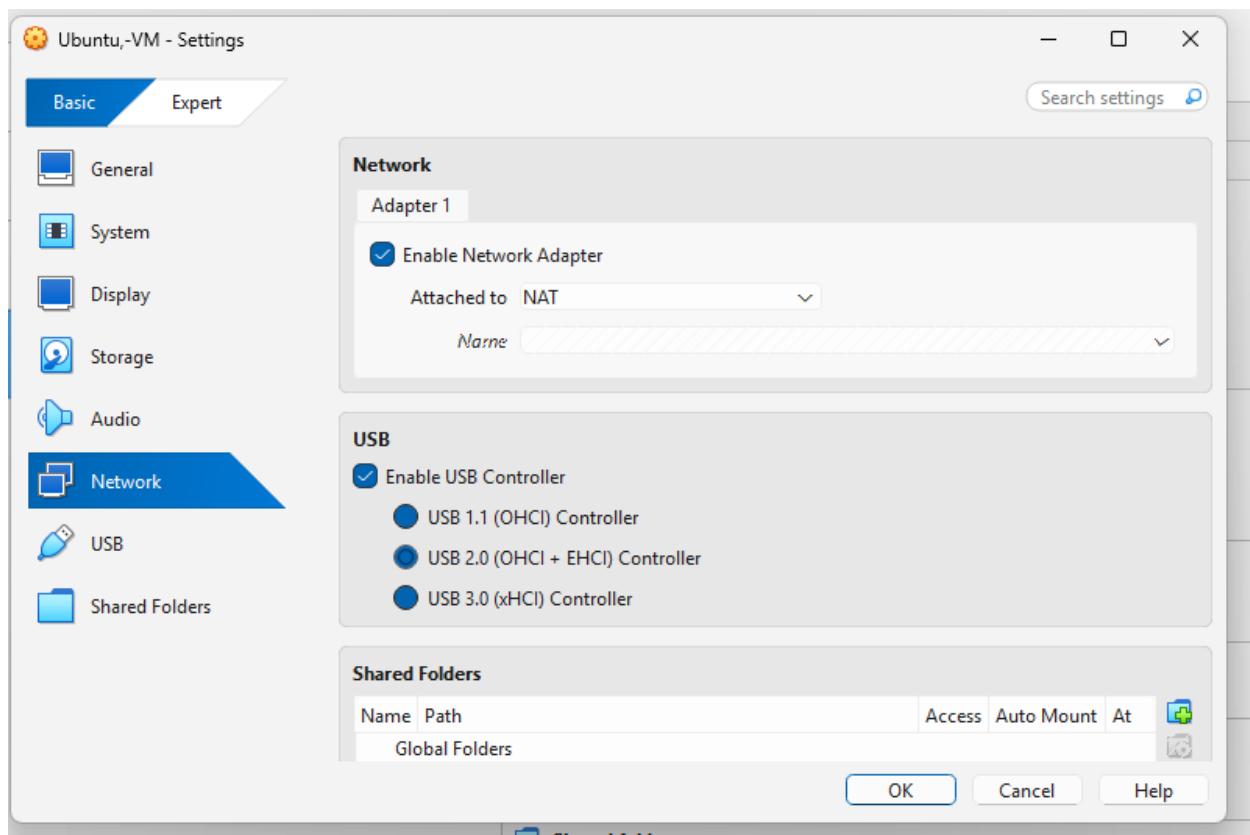


On termine l'installation de VirtualBox, on crée maintenant une machine Virtuelle (VM) en cliquant sur "New" et en remplissant le champ de création de la machine virtuelle



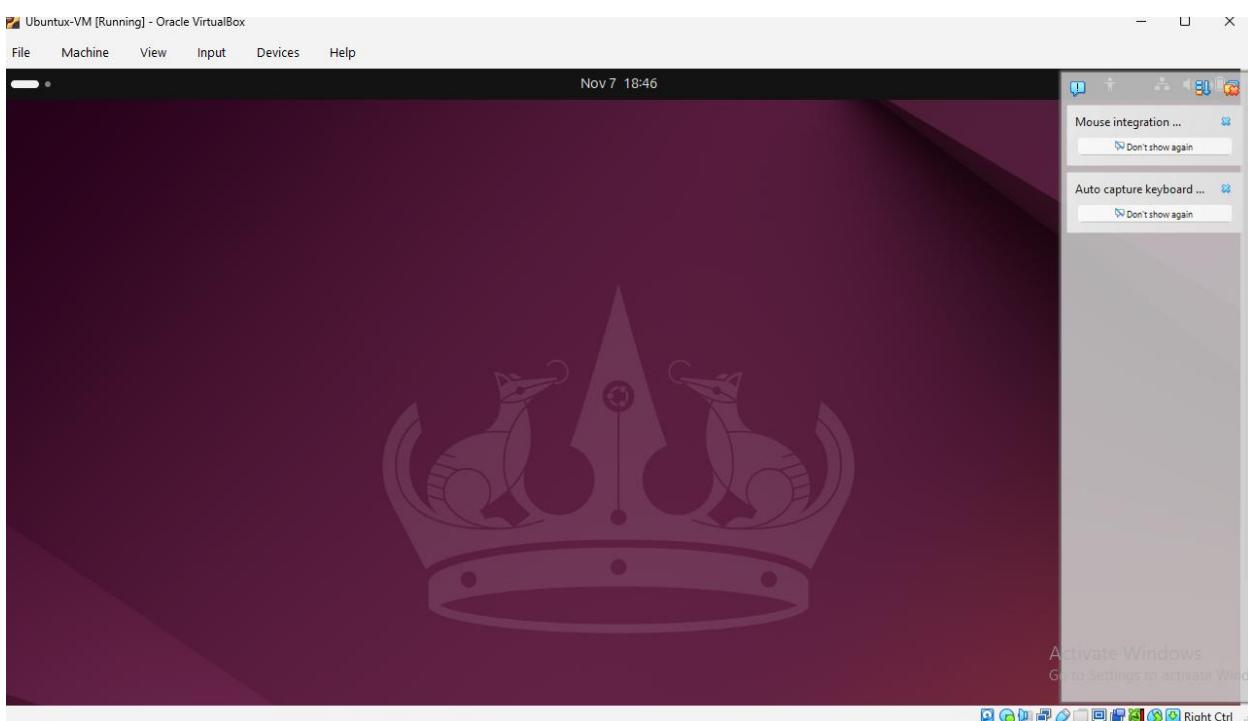
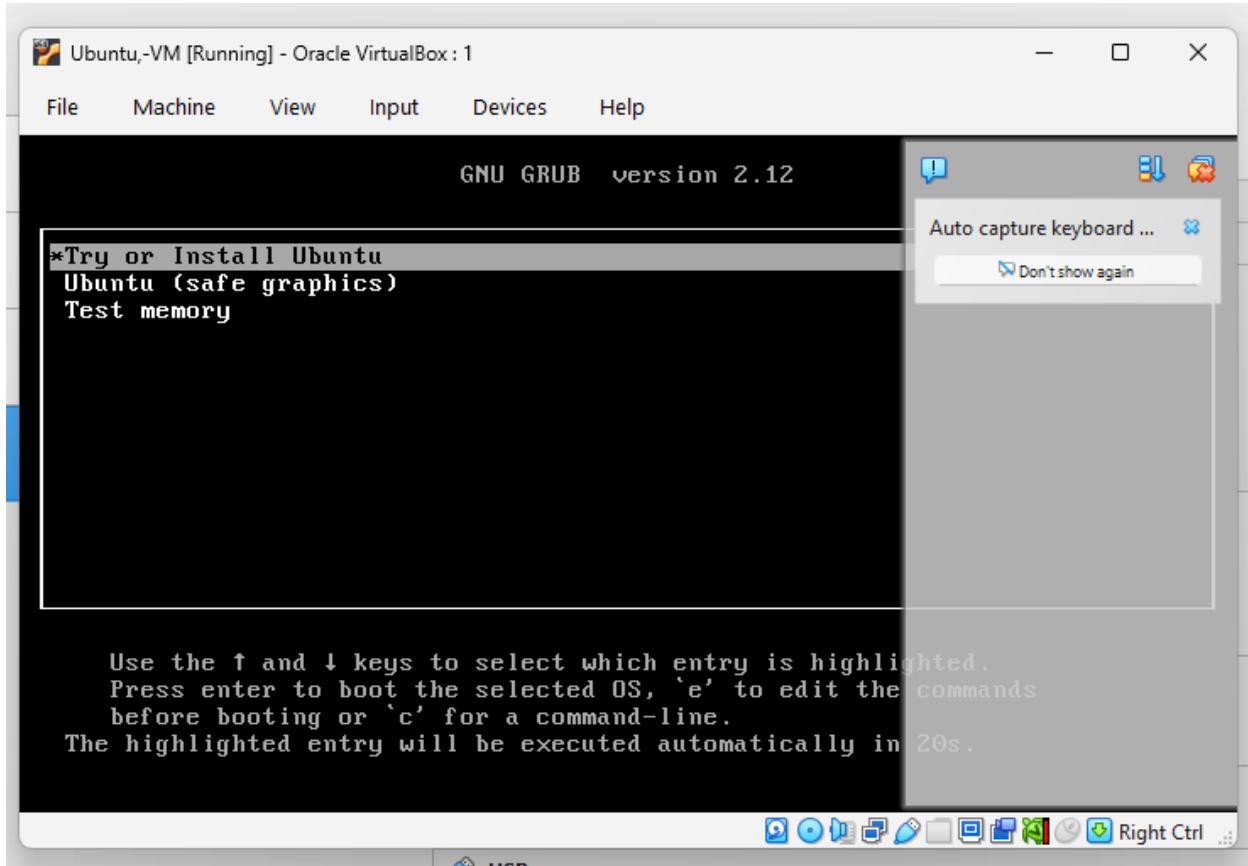
On fait maintenant la configuration de la machine virtuel apres on lance la machine

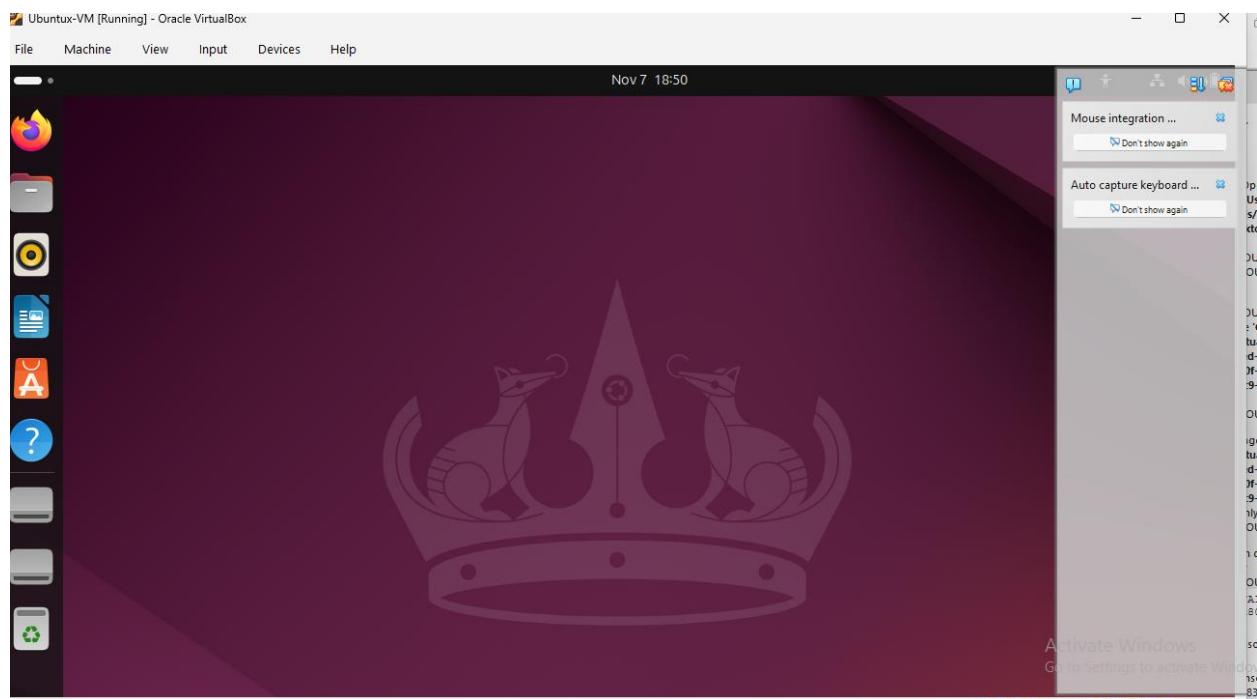
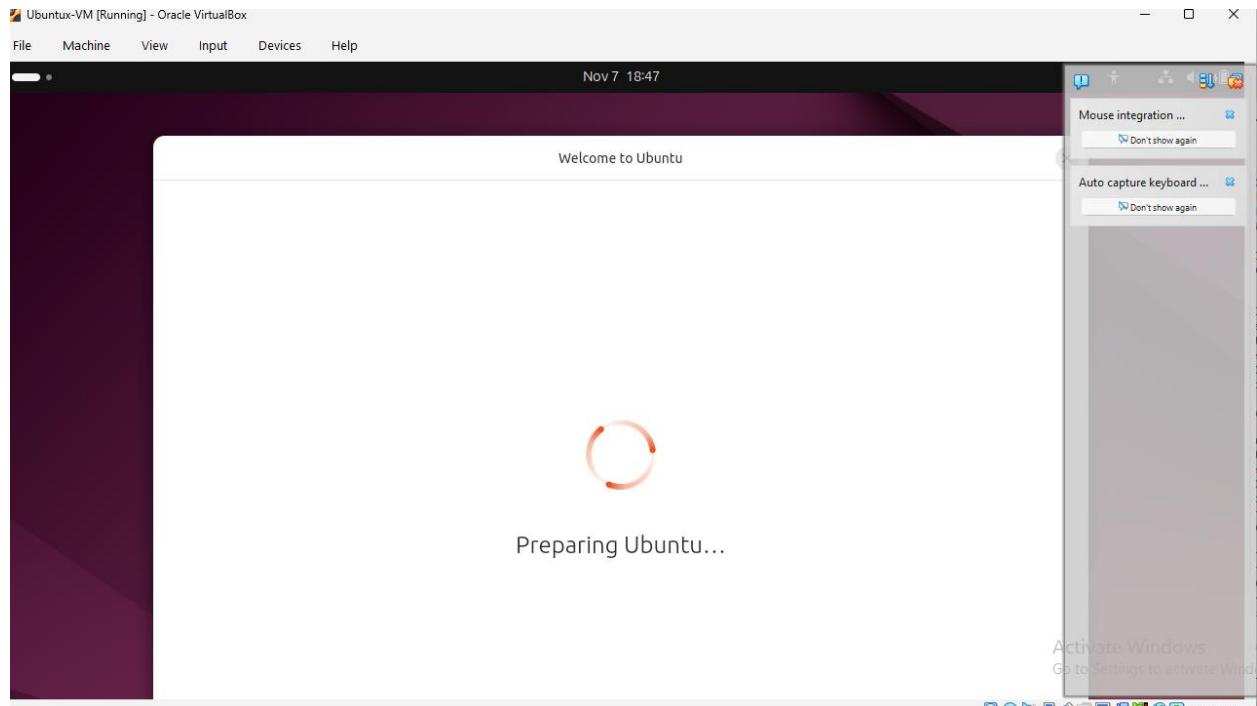




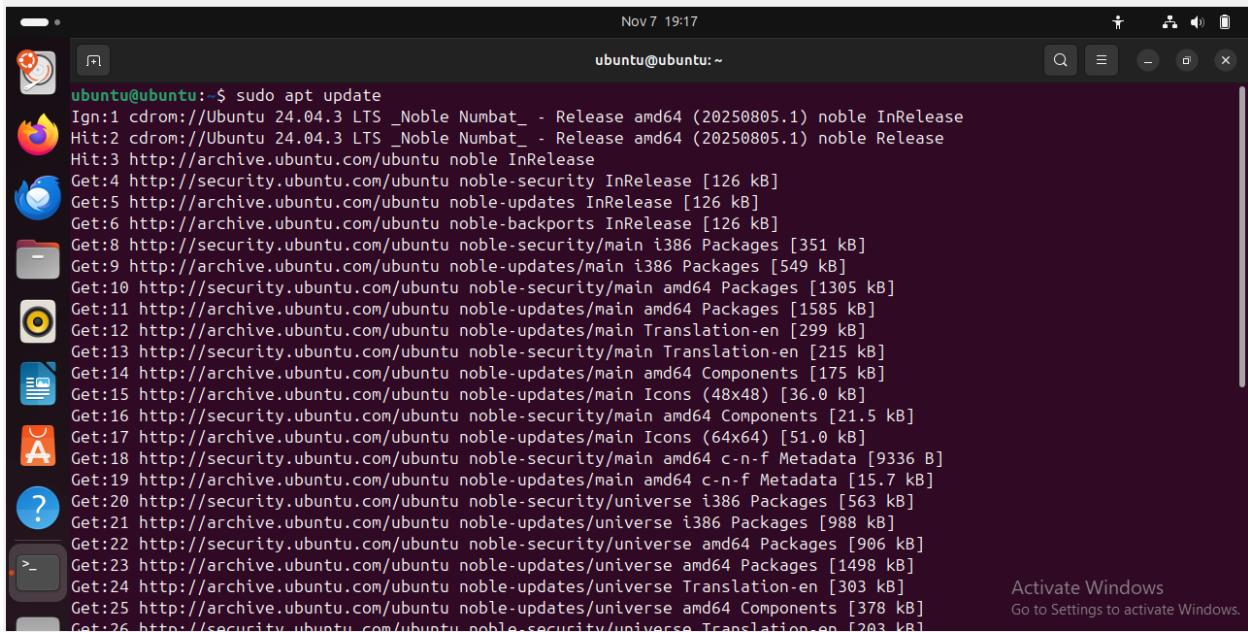
Installation d'Ubuntu

On ouvre la VM et lance l'installation

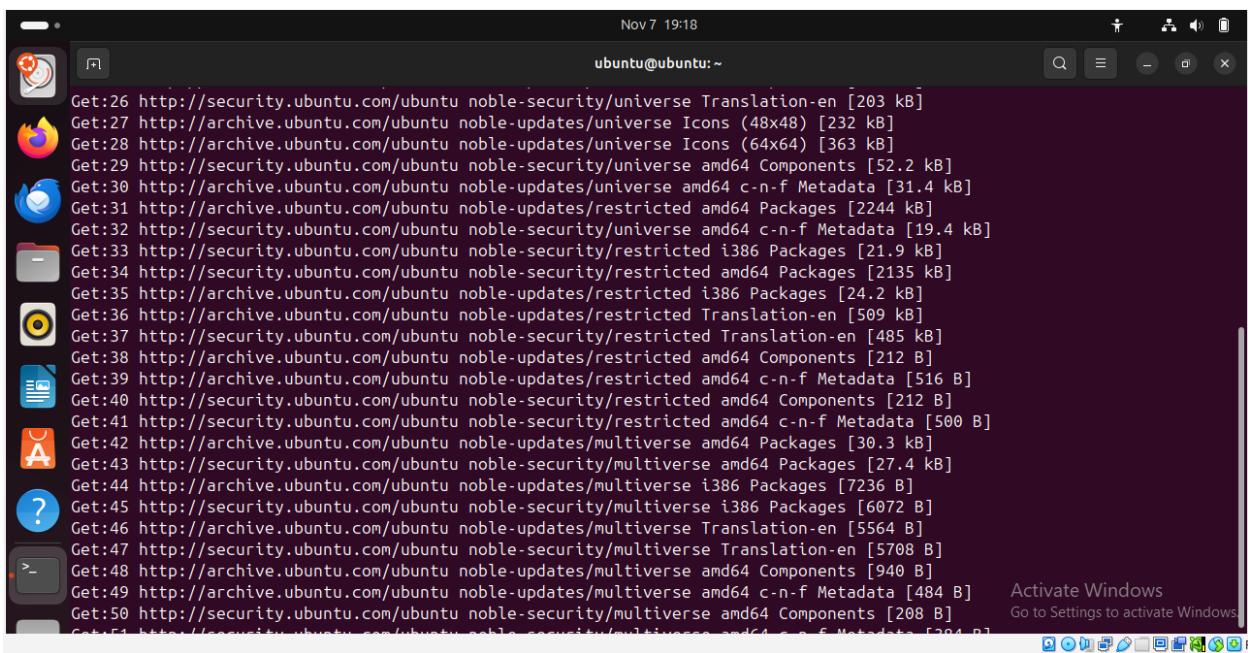




Apres l'intallation on configure en ouvrant le terminale et dans le terminal on tape



```
Nov 7 19:17
ubuntu@ubuntu:~$ sudo apt update
Ign:1 cdrom://Ubuntu 24.04.3 LTS _Noble Numbat_ - Release amd64 (20250805.1) noble InRelease
Hit:2 cdrom://Ubuntu 24.04.3 LTS _Noble Numbat_ - Release amd64 (20250805.1) noble Release
Hit:3 http://archive.ubuntu.com/ubuntu noble InRelease
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main i386 Packages [351 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/main i386 Packages [549 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1305 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1585 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [299 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [215 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [175 kB]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/main Icons (48x48) [36.0 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.5 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-updates/main Icons (64x64) [51.0 kB]
Get:18 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [9336 B]
Get:19 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [15.7 kB]
Get:20 http://security.ubuntu.com/ubuntu noble-security/universe i386 Packages [563 kB]
Get:21 http://archive.ubuntu.com/ubuntu noble-updates/universe i386 Packages [988 kB]
Get:22 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [906 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1498 kB]
Get:24 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [303 kB]
Get:25 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [378 kB]
Get:26 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [203 kB]
```



```
Nov 7 19:18
ubuntu@ubuntu:~$ sudo apt update
Get:26 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [203 kB]
Get:27 http://archive.ubuntu.com/ubuntu noble-updates/universe Icons (48x48) [232 kB]
Get:28 http://archive.ubuntu.com/ubuntu noble-updates/universe Icons (64x64) [363 kB]
Get:29 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.2 kB]
Get:30 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [31.4 kB]
Get:31 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [2244 kB]
Get:32 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [19.4 kB]
Get:33 http://security.ubuntu.com/ubuntu noble-security/restricted i386 Packages [21.9 kB]
Get:34 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [2135 kB]
Get:35 http://archive.ubuntu.com/ubuntu noble-updates/restricted i386 Packages [24.2 kB]
Get:36 http://archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [509 kB]
Get:37 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [485 kB]
Get:38 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:39 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [516 B]
Get:40 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:41 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [500 B]
Get:42 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [30.3 kB]
Get:43 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [27.4 kB]
Get:44 http://archive.ubuntu.com/ubuntu noble-updates/multiverse i386 Packages [7236 B]
Get:45 http://security.ubuntu.com/ubuntu noble-security/multiverse i386 Packages [6072 B]
Get:46 http://archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [5564 B]
Get:47 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [5708 B]
Get:48 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:49 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [484 B]
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Get:51 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [204 B]
```

Ubuntu-VM [Running] - Oracle VirtualBox

File Machine View Input Devices Help

```
Get:45 http://security.ubuntu.com/ubuntu noble-security/multiverse i386 Packages [6072 B]
Get:46 http://archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [5564 B]
[ Thunderbird Mail security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [5708 B]
Get:48 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:49 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [484 B]
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Get:51 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [384 B]
Get:52 http://archive.ubuntu.com/ubuntu noble-backports/main i386 Packages [33.0 kB]
Get:53 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [40.4 kB]
Get:54 http://archive.ubuntu.com/ubuntu noble-backports/main Translation-en [9208 B]
Get:55 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7140 B]
Get:56 http://archive.ubuntu.com/ubuntu noble-backports/main Icons (48x48) [9530 B]
Get:57 http://archive.ubuntu.com/ubuntu noble-backports/main Icons (64x64) [11.2 kB]
Get:58 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [368 B]
Get:59 http://archive.ubuntu.com/ubuntu noble-backports/universe i386 Packages [15.8 kB]
Get:60 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [28.9 kB]
Get:61 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [17.5 kB]
Get:62 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.0 kB]
Get:63 http://archive.ubuntu.com/ubuntu noble-backports/universe Icons (48x48) [24.3 kB]
Get:64 http://archive.ubuntu.com/ubuntu noble-backports/universe Icons (64x64) [33.4 kB]
Get:65 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1444 B]
Get:66 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:67 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Fetched 16.3 MB in 56s (292 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
168 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ubuntu: ~ ]
```

Puis on continue en tapant

sudo apt upgrade -y

Ubuntu-VM [Running] - Oracle VirtualBox

File Machine View Input Devices Help

Nov 7 20:21

ubuntu@ubuntu:~

```
libnmb0 libnss-sss libnss-systemd libopenjp2-7 libpam-modules libpam-modules-bin libpam-runtime libpam-sss
libpam-systemd libpam0g libpoppler-cpp0t64 libpoppler-glib8t64 libpoppler134 libpython3.12-minimal
libpython3.12-stdlib libpython3.12t64 libsmclient0 libsqlite3-0 libssh-4 libssl3t64 libsss-certmap0 libsss-idmap0
libsss-nss-idmap0 libsystemd-shared libsystemd0 libtiff6 libudev1 libudisks2-0 libwbclient0 libwebkit2gtk-4.1-0
libwebkitgtk-6.0-4 libwireplumber-0.4-0 libxatracker2 libxml2 linux-firmware linux-generic-hwe-24.04
linux-headers-generic-hwe-24.04 linux-image-generic-hwe-24.04 linux-libc-dev linux-tools-common locales
mesa-libgallium mesa-vulkan-drivers network-manager network-manager-config-connectivity-ubuntu openssh-client
openssl openvpn poppler-utils powermgmt-base python3-software-properties python3-sss python3.12 python3.12-minimal
samba-libs simple-scan snapd software-properties-common software-properties-gtk sssd sssd-ad sssd-ad-common
sssd-common sssd-ipa sssd-krb5 sssd-krb5-common sssd-ldap sssd-proxy systemd systemd-dev systemd-hwe-hwdb
systemd-oond systemd-resolved systemd-timesyncd tcpcdump tecla ubuntu-drivers-common udev udisks2
vim-common vim-tiny wireplumber wpasupplicant xserver-common xserver-xephyr xserver-xorg-video-esa xwayland xxd
168 upgraded, 8 newly installed, 0 to remove and 0 not upgraded.
86 standard LTS security updates
Need to get 1001 MB of archives.
After this operation, 446 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 coreutils amd64 9.4-3ubuntu6.1 [1413 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 dpkg amd64 1.22.6ubuntu6.5 [1282 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc6-dbg amd64 2.39-0ubuntu8.6 [7458 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc-devtools amd64 2.39-0ubuntu8.6 [29.3 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc6-dev amd64 2.39-0ubuntu8.6 [2125 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc-dev-bin amd64 2.39-0ubuntu8.6 [20.4 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 linux-libc-dev amd64 6.8.0-87.88 [1934kB]Windows
Get:8 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc6 amd64 2.39-0ubuntu8.6 [3263kB]Settings to activate Windows.
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libbc-bin amd64 2.39-0ubuntu8.6 [682 kB]
```

Ubuntu-VM [Running] - Oracle VirtualBox

File Machine View Input Devices Help

Nov 7 20:22

ubuntu@ubuntu:~

```
Get:35 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpam-modules-bin amd64 1.5.3-5ubuntu5.5 [51.9 kB]
Get:36 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpam-modules amd64 1.5.3-5ubuntu5.5 [286 kB]
Get:37 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpython3.12t64 amd64 3.12.3-1ubuntu0.8 [2355 kB]
Get:38 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 python3.12 amd64 3.12.3-1ubuntu0.8 [651 kB]
Get:39 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpython3.12-stdlib amd64 3.12.3-1ubuntu0.8 [2068 kB]
Get:40 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpython3.12-minimal amd64 3.12.3-1ubuntu0.8 [2334 kB]
Get:41 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpython3.12-minimal amd64 3.12.3-1ubuntu0.8 [836 kB]
Get:42 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libsqlite3-0 amd64 3.45.1-1ubuntu2.5 [701 kB]
Get:43 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bluez amd64 5.72-0ubuntu5.5 [1361 kB]
Get:44 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-ipp-utils amd64 2.4.7-1.2ubuntu7.4 [233 kB]
Get:45 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-common all 2.4.7-1.2ubuntu7.4 [263 kB]
Get:46 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-bsd amd64 2.4.7-1.2ubuntu7.4 [42.2 kB]
Get:47 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-client amd64 2.4.7-1.2ubuntu7.4 [153 kB]
Get:48 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-core-drivers amd64 2.4.7-1.2ubuntu7.4 [29.5 kB]
Get:49 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-pdpc amd64 2.4.7-1.2ubuntu7.4 [119 kB]
Get:50 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cups-server-common all 2.4.7-1.2ubuntu7.4 [419 kB]
Get:51 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 ghostscript amd64 10.02.1-dfsg1-0ubuntu7.8 [43.4 kB]
Get:52 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libgs10 amd64 10.02.1-dfsg1-0ubuntu7.8 [3897 kB]
Get:53 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libgs10-common all 10.02.1-dfsg1-0ubuntu7.8 [488 kB]
Get:54 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libgs-common all 10.02.1-dfsg1-0ubuntu7.8 [176 kB]
Get:55 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libopenjp2-7 amd64 2.5.0-2ubuntu0.4 [173 kB]
Get:56 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libtiff6 amd64 4.5.1+git230720-4ubuntu2.4 [199 kB]
Get:57 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpoppler-cpp0t64 amd64 24.02.0-1ubuntu9.8 [41.3 kB]
Get:58 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpoppler-glib8t64 amd64 24.02.0-1ubuntu9.8 [157 kB]
Get:59 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 poppler-utils amd64 24.02.0-1ubuntu9.8 [212 kB]Windows
Get:60 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpoppler134 amd64 24.02.0-1ubuntu9.8 [1118 kB]
```

```
Ubuntu-VM [Running] - Oracle VirtualBox
File Machine View Input Devices Help

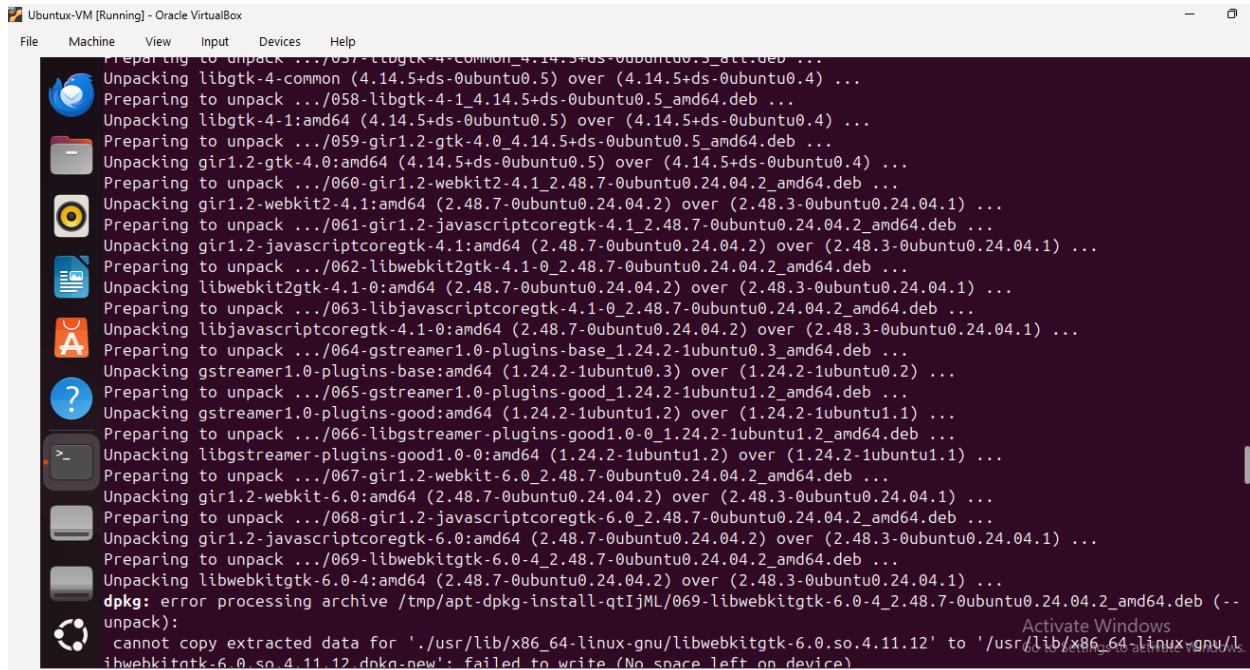
Get:168 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 python3-software-properties all 0.99.49.3 [29.9 kB]
Get:169 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 simple-scan amd64 46.0-0ubuntu2.1 [208 kB]
Get:170 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 snapd amd64 2.71+ubuntu24.04 [33.9 MB]
97% [170 snapd 14.4 MB/33.9 MB 43%]
97% [170 snapd 14.6 MB/33.9 MB 43%]
Get:171 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 tecla amd64 46.0-1ubuntu0.1 [26.4 kB]
Get:172 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 xserver-xephyr amd64 2:21.1.12-1ubuntu1.5 [1019 kB]
Get:173 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 xserver-xorg-video-nouveau amd64 1:1.0.17-2ubuntu0.1 [91.5 kB]
Get:174 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 xserver-xorg-video-vesa amd64 1:2.6.0-1ubuntu0.1 [15.5 kB]
Get:175 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 xwayland amd64 2:23.2.6-1ubuntu0.7 [946 kB]
Get:176 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 cloud-init all 25.2-0ubuntu1~24.04.1 [625 kB]
Fetched 1001 MB in 1h 12min 34s (230 kB/s)
Extracting templates from packages: 100%
Preconfiguring packages ...
setting xserver-xorg-legacy/xwrapper/allowed_users from configuration file
(Reading database ... 212979 files and directories currently installed.)
Preparing to unpack .../coreutils_9.4-3ubuntu6.1_amd64.deb ...
Unpacking coreutils (9.4-3ubuntu6.1) over (9.4-3ubuntu6) ...
Setting up coreutils (9.4-3ubuntu6.1) ...
(Reading database ... 212979 files and directories currently installed.)
Preparing to unpack .../dpkg_1.22.6ubuntu6.5_amd64.deb ...
Unpacking dpkg (1.22.6ubuntu6.5) over (1.22.6ubuntu6.1) ...
Setting up dpkg (1.22.6ubuntu6.5) ...
(Reading database ... 212979 files and directories currently installed.)

Activate Windows
Go to Settings to activate Windows.
```

```
Ubuntu-VM [Running] - Oracle VirtualBox
File Machine View Input Devices Help

Preparing to unpack .../systemd-timesyncd_255.4-1ubuntu8.11_amd64.deb ...
Unpacking systemd-timesyncd (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../libssl3t64_3.0.13-0ubuntu3.6_amd64.deb ...
Unpacking libssl3t64:amd64 (3.0.13-0ubuntu3.6) over (3.0.13-0ubuntu3.5) ...
Setting up libssl3t64:amd64 (3.0.13-0ubuntu3.6) ...
(Reading database ... 212986 files and directories currently installed.)
Preparing to unpack .../0-systemd-resolved_255.4-1ubuntu8.11_amd64.deb ...
Unpacking systemd-resolved (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../1-systemd-oomd_255.4-1ubuntu8.11_amd64.deb ...
Unpacking systemd-oomd (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../2-xserver-xorg-legacy_2%3a21.1.12-1ubuntu1.5_amd64.deb ...
Unpacking xserver-xorg-legacy (2:21.1.12-1ubuntu1.5) over (2:21.1.12-1ubuntu1.4) ...
Preparing to unpack .../3-xserver-xorg-core_2%3a21.1.12-1ubuntu1.5_amd64.deb ...
Unpacking xserver-xorg-core (2:21.1.12-1ubuntu1.5) over (2:21.1.12-1ubuntu1.4) ...
Preparing to unpack .../4-systemd-dev_255.4-1ubuntu8.11_all.deb ...
Unpacking systemd-dev (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../5-systemd_255.4-1ubuntu8.11_amd64.deb ...
Unpacking systemd (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../6-udev_255.4-1ubuntu8.11_amd64.deb ...
Unpacking udev (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Preparing to unpack .../7-libsystemd-shared_255.4-1ubuntu8.11_amd64.deb ...
Unpacking libsystemd-shared:amd64 (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Setting up libsystemd-shared:amd64 (255.4-1ubuntu8.11) ...
(Reading database ... 212986 files and directories currently installed.)
Preparing to unpack .../libsystemd0_255.4-1ubuntu8.11_amd64.deb ...
Unpacking libsystemd0:amd64 (255.4-1ubuntu8.11) over (255.4-1ubuntu8.10) ...
Setting up libsystemd0:amd64 (255.4-1ubuntu8.11) ...
Setting up systemd-dev (255.4-1ubuntu8.11) ...
Setting up systemd (255.4-1ubuntu8.11) ...
(Reading database ... 212986 files and directories currently installed.)

Activate Windows
Go to Settings to activate Windows.
```



Ce TD visait à mieux connaître VirtualBox et apprendre à créer une machine virtuelle, faire la configuration.

Pour moi c'était très constructif sauf que dans la création de la machine j'avais des petits problèmes, mais avec l'aide de mes camarades je l'ai réalisé avec succès, aussi le lancement de la machine a pris un peu trop de temps.