

INSTITUT UNIVERSITAIRE DES SCIENCES (IUS)

Faculté des Sciences Technologies

TD No 2 – Systeme

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.

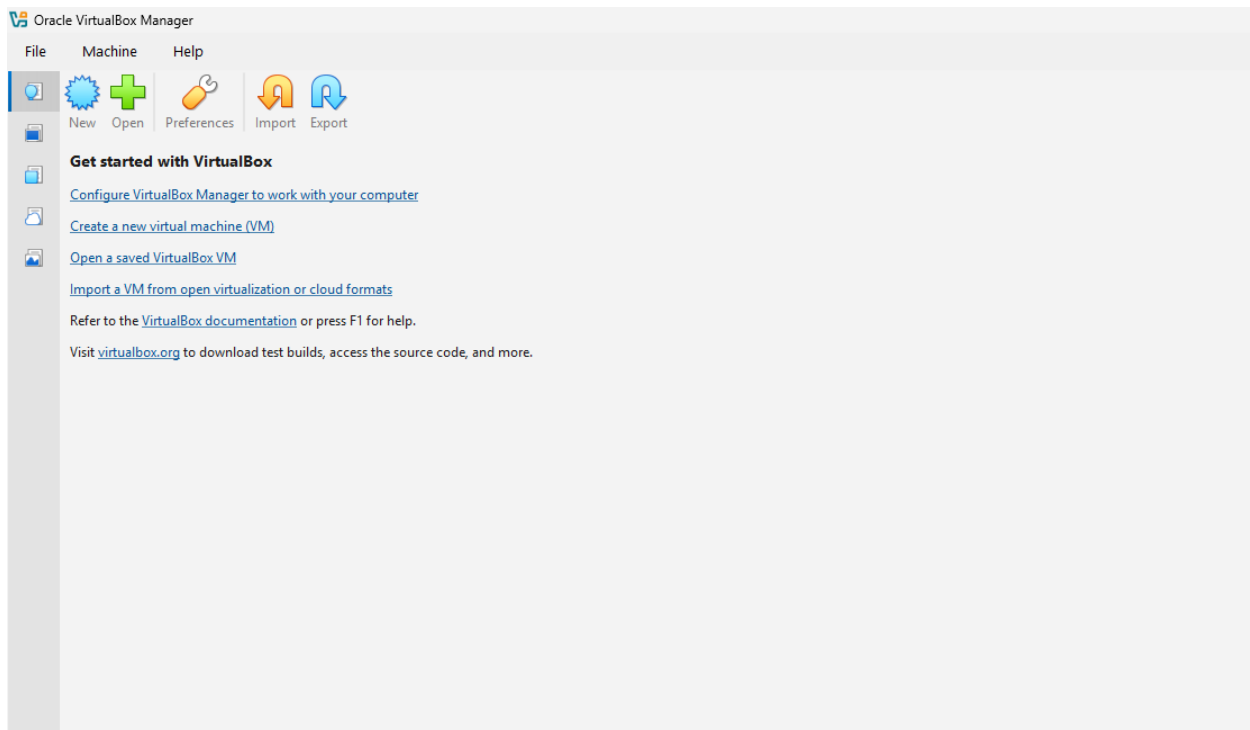
La virtualisation est une technologie qui permet de créer plusieurs environnements simulés ou ressources spécialisées à partir d'un seul système physique. Son logiciel, appelé hyperviseur, est directement relié au matériel et permet de fragmenter ce système unique en plusieurs environnements distincts. 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 Visual Studio C++ 2019. Une fois les deux applications installées on peut travailler en installant Ubuntu et la configurer sur VirtualBox.

Les démarches:

installation de VirtualBox



On finit l'installation de VirtualBox, on crée maintenant une machine Virtuelle (VM) on clique sur New et on remplit le champ de Création de la machine virtuelle.



Virtual machine name and operating system

The ISO image is used to install the operating system on the VM.

VM Name

Ubuntu-x-VM

VM Folder

C:\Users\magda\VirtualBox VMs

ISO Image

<not selected>

OS Edition

OS

Linux


OS Distribution

Ubuntu

OS Version

Ubuntu (64-bit)

☐ Proceed with Unattended Installation

 No ISO image is selected, the guest OS will need to be installed manually.


Activate Windows

Go to Settings to activate Windows.

Back

Next

Cancel



Specify virtual hardware

Specify the VM's hardware. Resources allocated to the VM will not be available to the host when the VM is running.

Base Memory

4096 MB

Number of CPUs

1

Disk Size

50.00 GB

☐ Use EFI

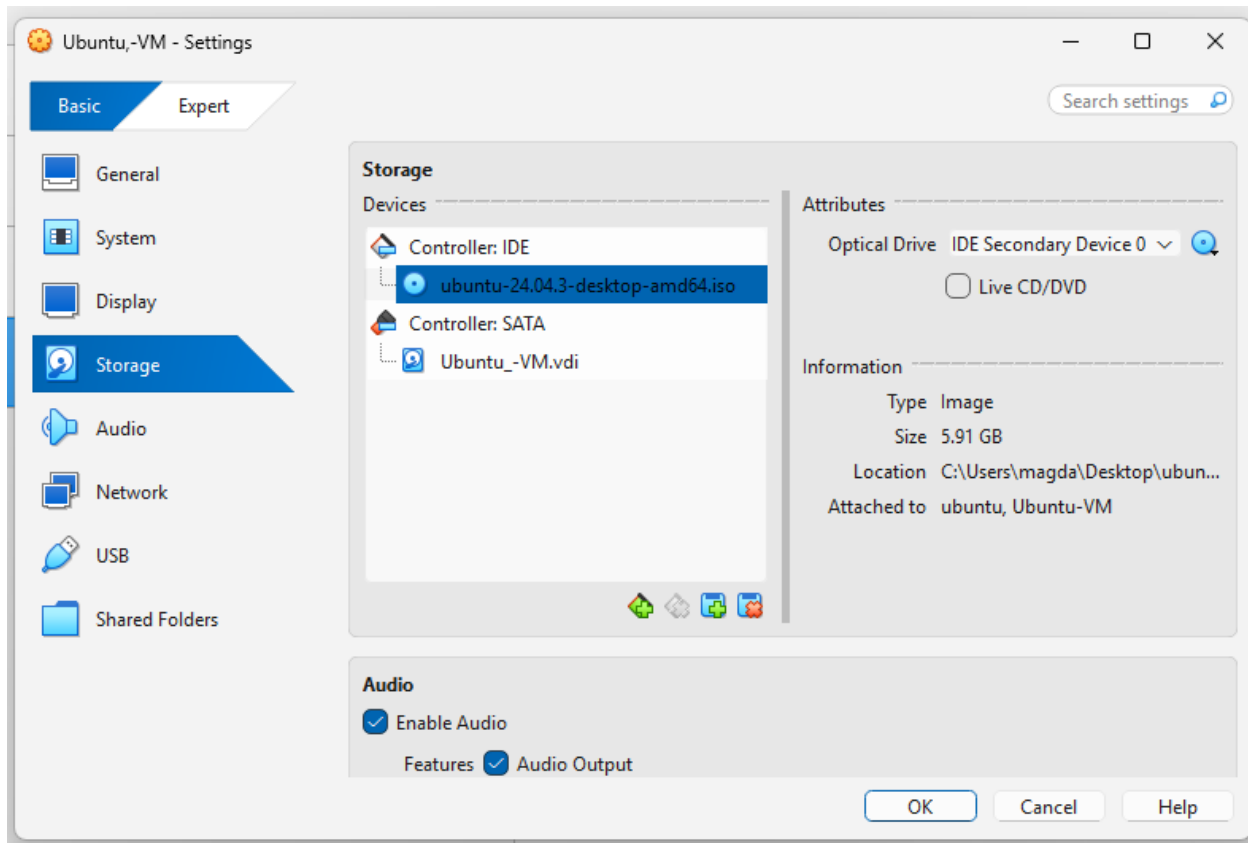
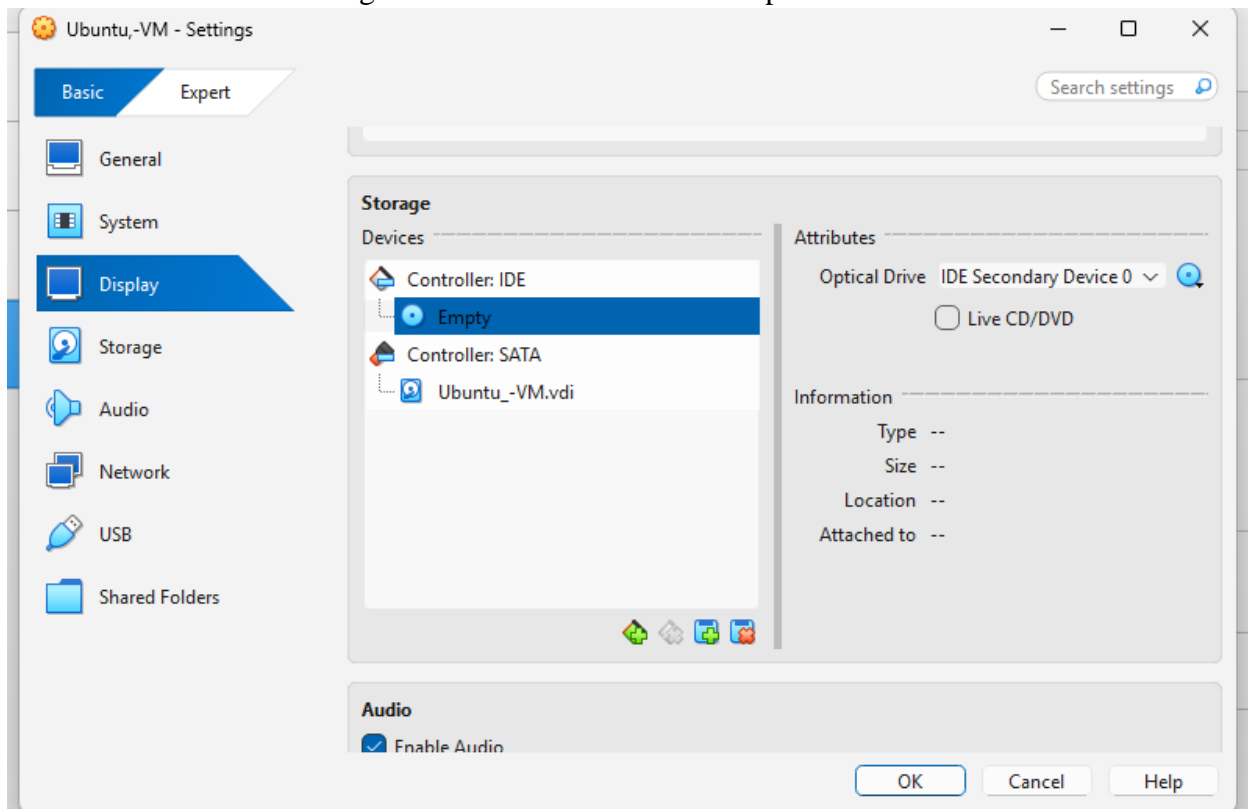
Help

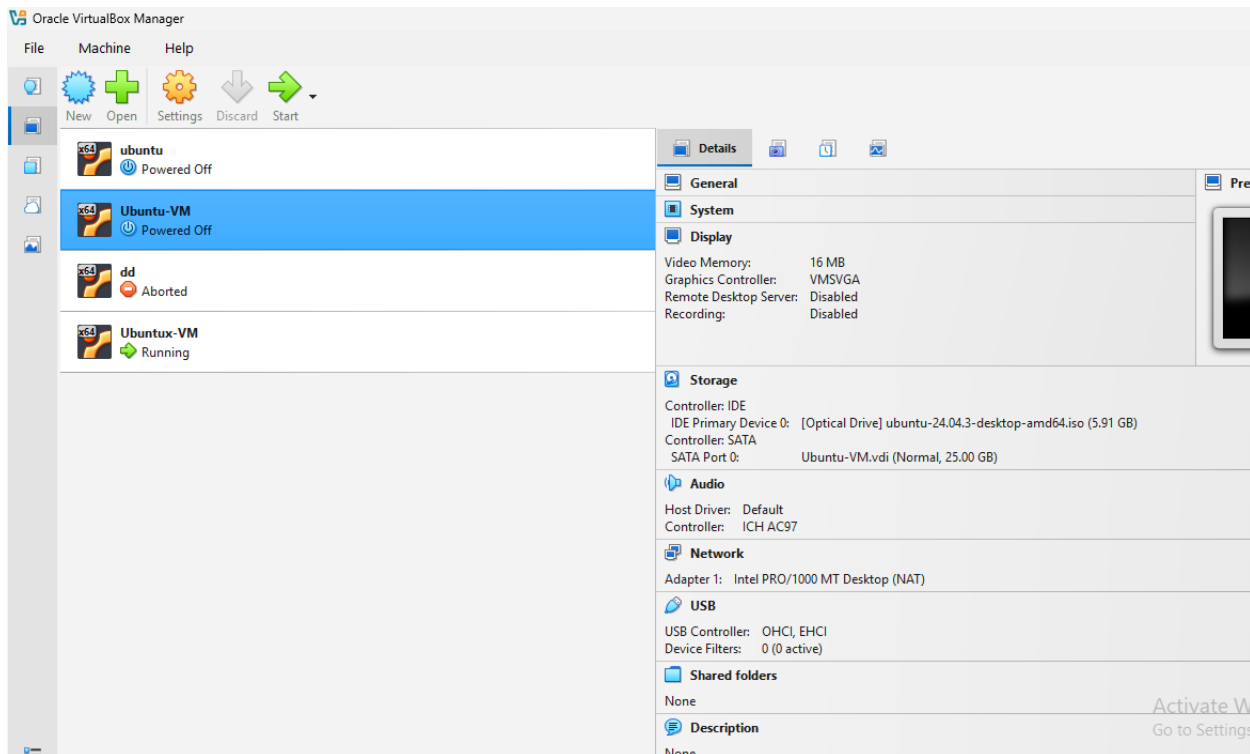
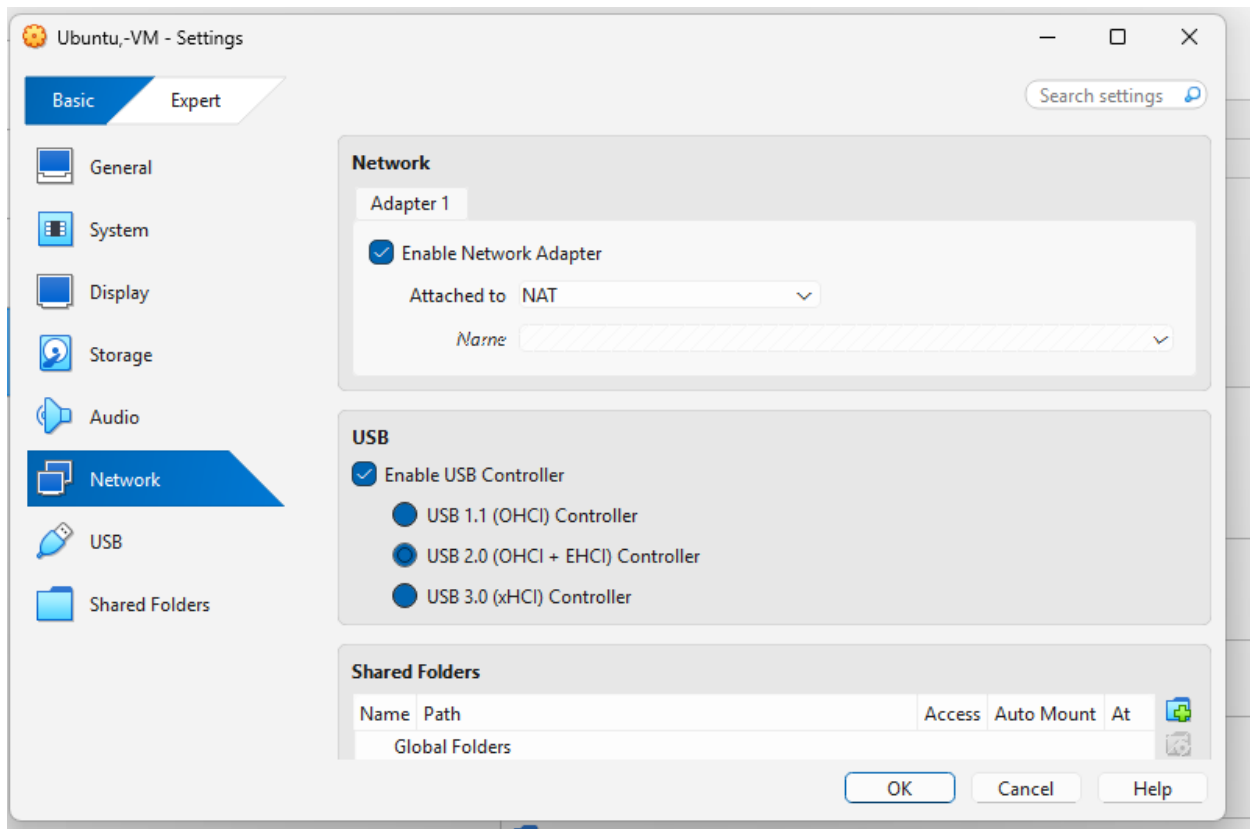
Back

Next

Cancel

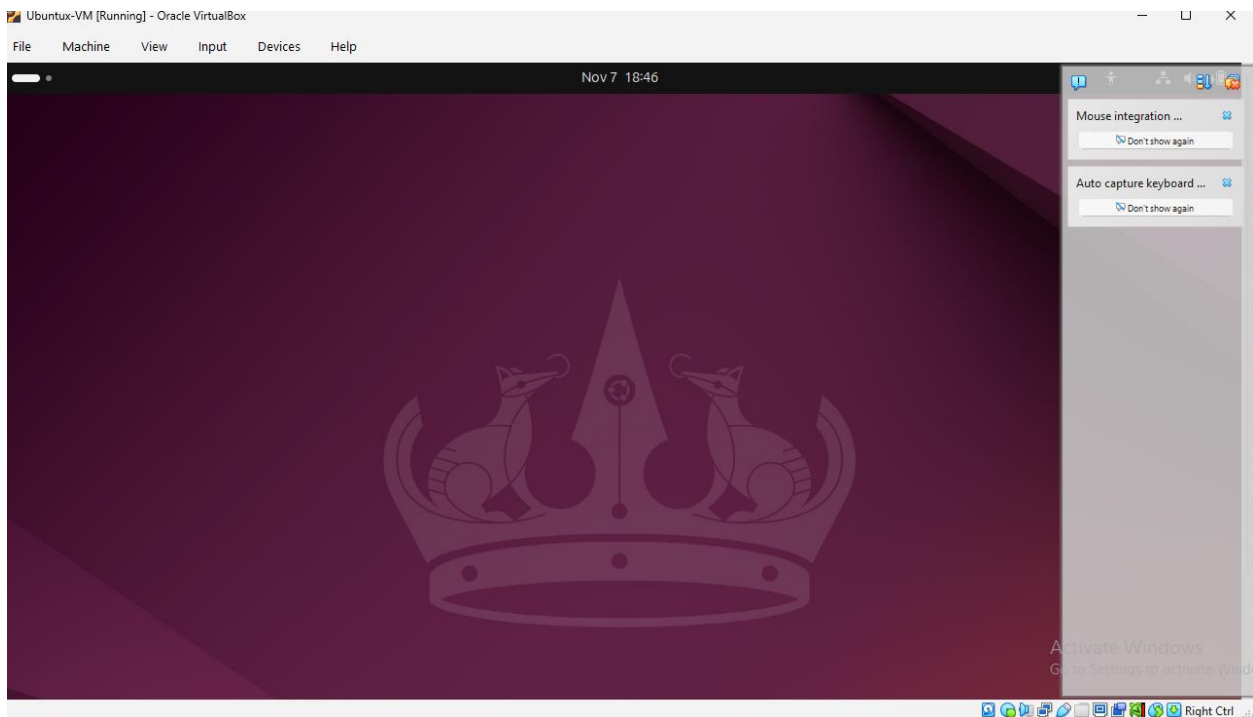
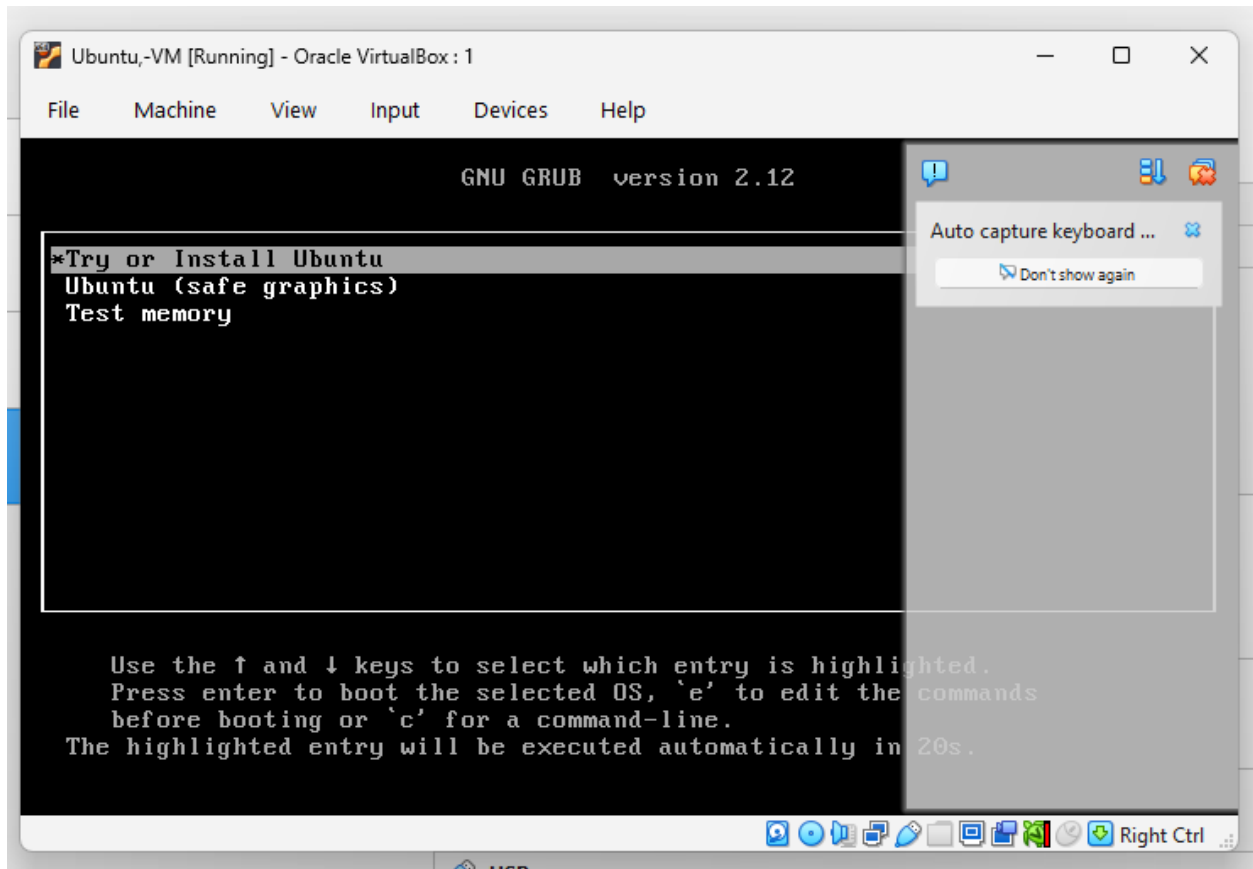
On fait maintenant la configuration de la machine virtuel apres on lance la machine

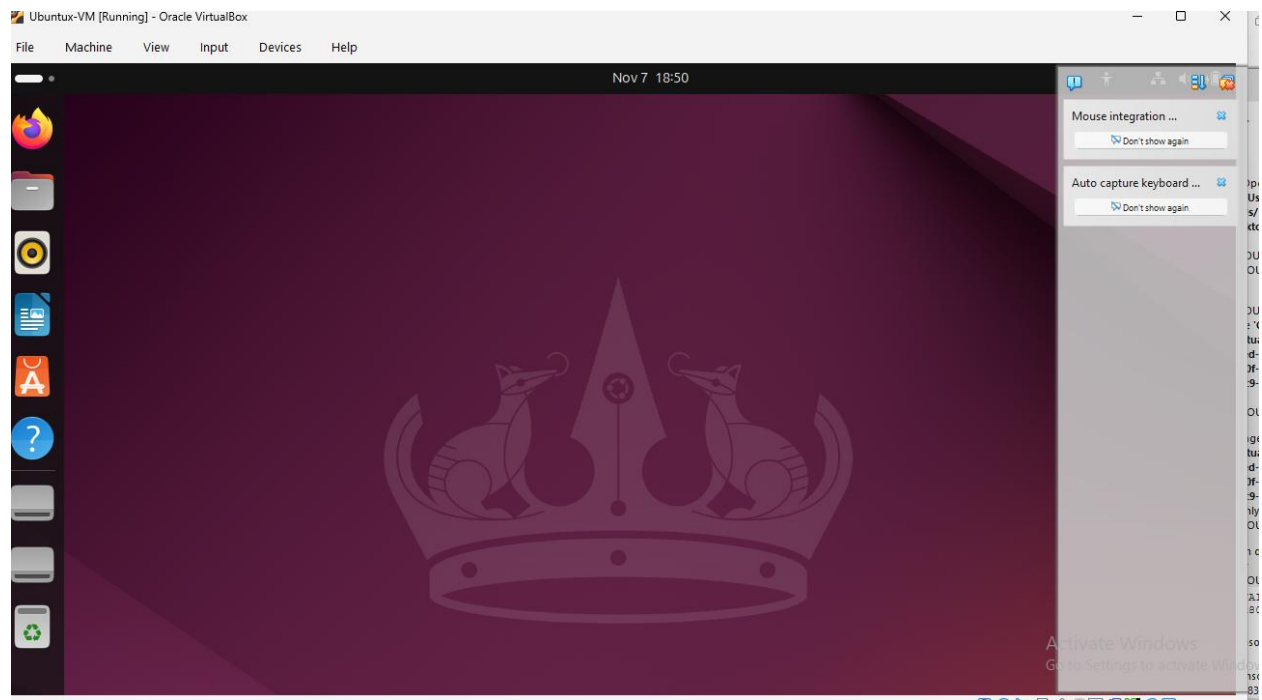
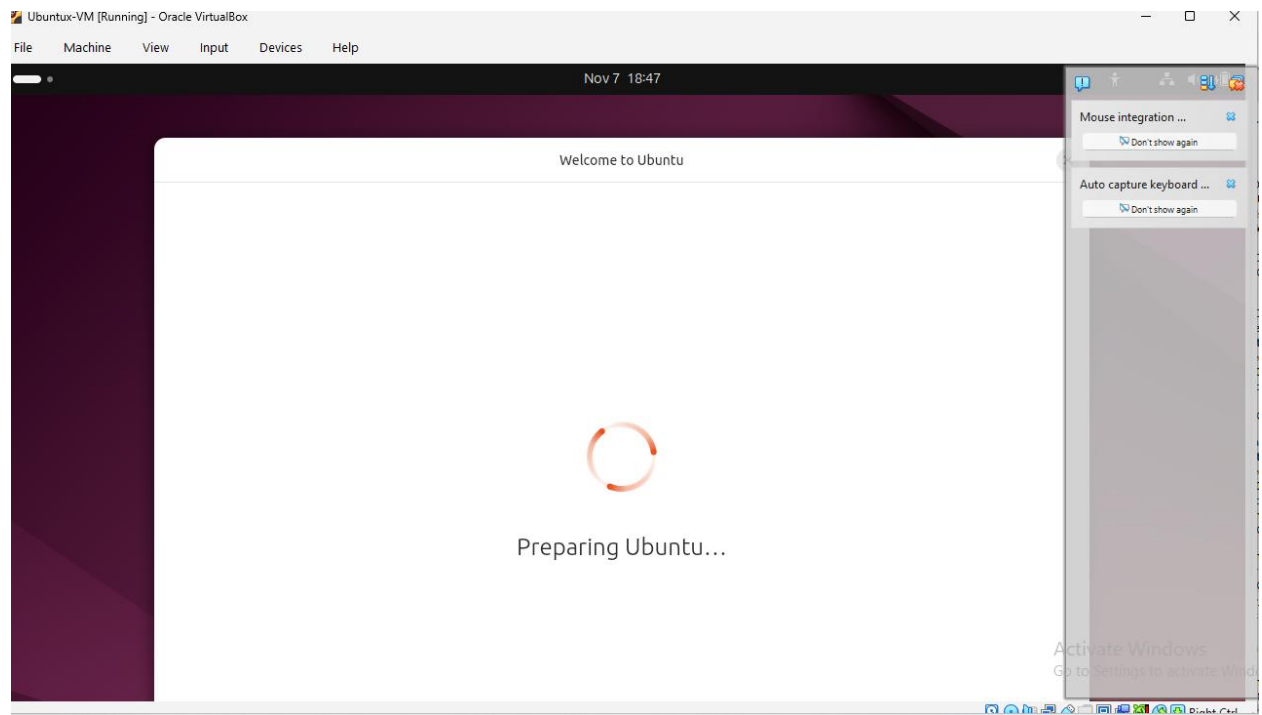




Installation d'Ubuntu

On ouvre la VM et lance l'installation





Après l'installation on configure en ouvrant le terminale et dans le terminal on tape

```
Nov 7 19:17
ubuntu@ubuntu: ~
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://security.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: ~
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 [5204 B]
```



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

Nov 7 20:21

ubuntu@ubuntu: ~

libnm0 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 libwebkitgtk-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-ls 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-oom systemd-resolved systemd-sysv systemd-timesyncd tcpdump tecla ubuntu-drivers-common udev udisks2
vim-common vim-tiny wireplumber wpasupplicant xserver-common xserver-xephyr xserver-xorg-core xserver-xorg-legacy
xserver-xorg-video-nouveau xserver-xorg-video-vesa 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 libc6-dbg amd64 2.39-0ubuntu8.6 [7458 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libc-devtools amd64 2.39-0ubuntu8.6 [29.3 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libc6-dev amd64 2.39-0ubuntu8.6 [2125 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libc-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 [1931 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libc6 amd64 2.39-0ubuntu8.6 [3263 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libc-bin amd64 2.39-0ubuntu8.6 [682 kB]
```

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

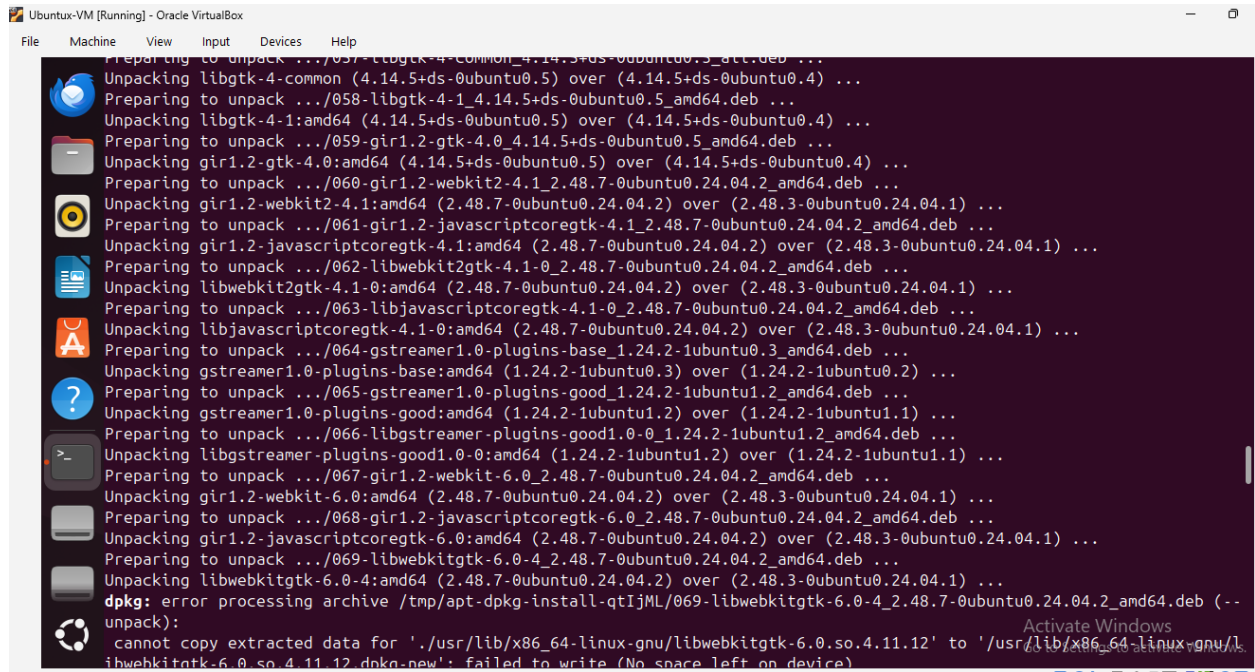
Nov 7 20:22

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 python3.12-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-ppdc 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 [1457 kB]
Get:59 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 poppler-utils amd64 24.02.0-1ubuntu9.8 [242 kB]
Get:60 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpoppler134 amd64 24.02.0-1ubuntu9.8 [1118 kB]
```

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%] 292 kB/s 1mi
97% [170 snapd 14.6 MB/33.9 MB 43%] 292 kB/s 1mi
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.)

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.)



```
Preparing to unpack .../037-libgtk-4-common_4.14.5+ds-0ubuntu0.5_all.deb ...
Unpacking libgtk-4-common (4.14.5+ds-0ubuntu0.5) over (4.14.5+ds-0ubuntu0.4) ...
Preparing to unpack .../058-libgtk-4-1_4.14.5+ds-0ubuntu0.5_amd64.deb ...
Unpacking libgtk-4-1:amd64 (4.14.5+ds-0ubuntu0.5) over (4.14.5+ds-0ubuntu0.4) ...
Preparing to unpack .../059-gir1.2-gtk-4.0_4.14.5+ds-0ubuntu0.5_amd64.deb ...
Unpacking gir1.2-gtk-4.0:amd64 (4.14.5+ds-0ubuntu0.5) over (4.14.5+ds-0ubuntu0.4) ...
Preparing to unpack .../060-gir1.2-webkit2-4.1_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking gir1.2-webkit2-4.1:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../061-gir1.2-javascriptcoregtk-4.1_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking gir1.2-javascriptcoregtk-4.1:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../062-libwebkit2gtk-4.1-0_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking libwebkit2gtk-4.1-0:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../063-libjavascriptcoregtk-4.1-0_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking libjavascriptcoregtk-4.1-0:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../064-gstreamer1.0-plugins-base_1.24.2-1ubuntu0.3_amd64.deb ...
Unpacking gstreamer1.0-plugins-base:amd64 (1.24.2-1ubuntu0.3) over (1.24.2-1ubuntu0.2) ...
Preparing to unpack .../065-gstreamer1.0-plugins-good_1.24.2-1ubuntu1.2_amd64.deb ...
Unpacking gstreamer1.0-plugins-good:amd64 (1.24.2-1ubuntu1.2) over (1.24.2-1ubuntu1.1) ...
Preparing to unpack .../066-libgstreamer-plugins-good1.0-0_1.24.2-1ubuntu1.2_amd64.deb ...
Unpacking libgstreamer-plugins-good1.0-0:amd64 (1.24.2-1ubuntu1.2) over (1.24.2-1ubuntu1.1) ...
Preparing to unpack .../067-gir1.2-webkit-6.0_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking gir1.2-webkit-6.0:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../068-gir1.2-javascriptcoregtk-6.0_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking gir1.2-javascriptcoregtk-6.0:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
Preparing to unpack .../069-libwebkitgtk-6.0-4_2.48.7-0ubuntu0.24.04.2_amd64.deb ...
Unpacking libwebkitgtk-6.0-4:amd64 (2.48.7-0ubuntu0.24.04.2) over (2.48.3-0ubuntu0.24.04.1) ...
dpkg: error processing archive /tmp/apt-dpkg-install-qtIjML/069-libwebkitgtk-6.0-4_2.48.7-0ubuntu0.24.04.2_amd64.deb (--unpack):
cannot copy extracted data for '/usr/lib/x86_64-linux-gnu/libwebkitgtk-6.0.so.4.11.12' to '/usr/lib/x86_64-linux-gnu/libwebkitgtk-6.0.so.4.11.12.dpkg-new': failed to write (No space left on device)
```

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.