

sudo apt update && sudo apt upgrade -y

```
juan@A6Alumno27:/mnt/c/Windows/System32$ sudo apt update && sudo apt upgrade -y
[sudo] password for juan:
```

Actualizamos los repositorios

sudo apt install apt-transport-https ca-certificates curl software-properties-common -y

```
juan@A6Alumno27:/mnt/c/Windows/System32$ sudo apt install apt-transport-https ca-certificates curl software-properties-common -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
curl is already the newest version (8.5.0-2ubuntu10.6).
curl set to manually installed.
software-properties-common is already the newest version (0.99.49.3).
software-properties-common set to manually installed.
The following package was automatically installed and is no longer required:
  libllvm19
Use 'sudo apt autoremove' to remove it.
The following NEW packages will be installed:
  apt-transport-https
0 upgraded, 1 newly installed, 0 to remove and 1 not upgraded.
Need to get 3970 B of archives.
After this operation, 36.9 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 apt-transport-https all 2.8.3 [3970 B]
Fetched 3970 B in 0s (19.7 kB/s)
Selecting previously unselected package apt-transport-https.
(Reading database ... 40764 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_2.8.3_all.deb ...
Unpacking apt-transport-https (2.8.3) ...
Setting up apt-transport-https (2.8.3) ...
juan@A6Alumno27:/mnt/c/Windows/System32$
```

Instalamos los paquetes necesarios

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg

```
juan@A6Alumno27:/mnt/c/windows/System32$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
file '/usr/share/keyrings/docker-archive-keyring.gpg' exists. curl: (6) Could not resolve host: download.docker.com
```

Añadimos el repositorio oficial del docker

```
echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] \
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

```
juan@A6Alumno27:~$ echo \
"deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] \
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
juan@A6Alumno27:~$ sudo apt update
Get:1 https://download.docker.com/linux/ubuntu noble InRelease [48.5 kB]
Hit:2 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:6 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [32.7 kB]
Fetched 81.2 kB in 0s (272 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
juan@A6Alumno27:~$
```

Agregamos el repositorio

sudo apt update

```
juan@A6Alumno27:~$ echo \
"deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg]
https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | \
sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
juan@A6Alumno27:~$ sudo apt update
Get:1 https://download.docker.com/linux/ubuntu noble InRelease [48.5 kB]
Hit:2 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:6 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [32.7 kB]
Fetched 81.2 kB in 0s (272 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
juan@A6Alumno27:~$
```

actualizamos los repositorios

sudo apt install docker-ce docker-ce-cli containerd.io -y

```
juan@A6Alumno27:~$ sudo apt install docker-ce docker-ce-cli containerd.io -y
Reading package lists... Done
Setting up docker-ce-cli (5:28.5.1-1~ubuntu.24.04~noble) ...
Setting up libslirp0:amd64 (4.7.0-1ubuntu3) ...
Setting up pigz (2.8-1) ...
Setting up libnftnl0:amd64 (1.0.2-2build1) ...
Setting up docker-ce-rootless-extras (5:28.5.1-1~ubuntu.24.04~noble) ...
Setting up libnftables1:amd64 (1.0.9-1build1) ...
Setting up nftables (1.0.9-1build1) ...
Setting up slirp4netns (1.2.1-1build2) ...
Setting up libnetfilter-conntrack3:amd64 (1.0.9-6build1) ...
Setting up iptables (1.8.10-3ubuntu2) ...
update-alternatives: using /usr/sbin/iptables-legacy to provide /usr/sbin/iptables (iptables) in auto mode
update-alternatives: using /usr/sbin/ip6tables-legacy to provide /usr/sbin/ip6tables (ip6tables) in auto mode
update-alternatives: using /usr/sbin/iptables-nft to provide /usr/sbin/iptables (iptables) in auto mode
update-alternatives: using /usr/sbin/ip6tables-nft to provide /usr/sbin/ip6tables (ip6tables) in auto mode
update-alternatives: using /usr/sbin/arptables-nft to provide /usr/sbin/arptables (arptables) in auto mode
update-alternatives: using /usr/sbin/ebtables-nft to provide /usr/sbin/ebtables (ebtables) in auto mode
Setting up docker-ce (5:28.5.1-1~ubuntu.24.04~noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
```

sudo apt install docker-buildx-plugin docker-compose-plugin -y

```
juan@A6Alumno27:~$ sudo apt install docker-buildx-plugin docker-compose-plugin -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker-buildx-plugin is already the newest version (0.29.1-1~ubuntu.24.04~noble).
docker-buildx-plugin set to manually installed.
docker-compose-plugin is already the newest version (2.40.0-1~ubuntu.24.04~noble).
docker-compose-plugin set to manually installed.
The following package was automatically installed and is no longer required:
  libllvm19
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
juan@A6Alumno27:~$
```

sudo systemctl status docker

```

juan@A6Alumno27:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
   Active: active (running) since Thu 2025-10-09 09:13:52 CEST; 1min 37s ago
   TriggeredBy: ● docker.socket
     Docs: https://docs.docker.com
    Main PID: 4255 (dockerd)
      Tasks: 13
     Memory: 22.2M (peak: 26.1M)
        CPU: 220ms
    CGroup: /system.slice/docker.service
            └─4255 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.328327757+02:00" level=info msg="CDI directory does"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.336821579+02:00" level=info msg="Creating a contain"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.383839717+02:00" level=info msg="Loading containers"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.559262352+02:00" level=info msg="Loading containers"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.591124810+02:00" level=info msg="Docker daemon" comp
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.591524551+02:00" level=info msg="Initializing build"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.613974925+02:00" level=info msg="Completed buildkit"
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.618584809+02:00" level=info msg="Daemon has complet
Oct 09 09:13:52 A6Alumno27 dockerd[4255]: time="2025-10-09T09:13:52.618667745+02:00" level=info msg="API listen on /run
Oct 09 09:13:52 A6Alumno27 systemd[1]: Started docker.service - Docker Application Container Engine.
lines 1-22/22 (END)

```

verificamos que docker esta activo

docker info

```

juan@A6Alumno27:~$ docker info
Client: Docker Engine - Community
 Version: 28.5.1
 Context: default
 Debug Mode: false
 Plugins:
  buildx: Docker Buildx (Docker Inc.)
   Version: v0.29.1
   Path: /usr/libexec/docker/cli-plugins/docker-buildx
  compose: Docker Compose (Docker Inc.)
   Version: v2.40.0
   Path: /usr/libexec/docker/cli-plugins/docker-compose

Server:
 permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Frun%2Fdocker.sock/v1.51/info": dial unix /var/run/docker.sock: connect: permission denied
juan@A6Alumno27:~$

```

docker ps -a

```

juan@A6Alumno27:/mnt/c/Windows/System32$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES

```

verificamos la instalacion

sudo docker pull ubuntu

```

CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
juan@A6Alumno27:/mnt/c/Windows/System32$ sudo docker pull ubuntu
[sudo] password for juan:
Using default tag: latest
latest: Pulling from library/ubuntu
a1a21c96bc16: Pull complete
Digest: sha256:728785b59223d755e3e5c5af178fab1be7031f3522c5ccd7a0b32b80d8248123
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
juan@A6Alumno27:/mnt/c/Windows/System32$

```

sudo docker run -it ubuntu /bin/bash

```

docker.io/library/ubuntu:latest
juan@A6Alumno27:/mnt/c/Windows/System32$ sudo docker run -it ubuntu /bin/bash
root@e0bac4d33c39:/# docker

```

creamos y ejecutamos un contenedor

docker ps

```
root@e0bac4d33c39:/# cat /etc/os-release
PRETTY_NAME="Ubuntu 24.04.3 LTS"
NAME="Ubuntu"
VERSION_ID="24.04"
VERSION="24.04.3 LTS (Noble Numbat)"
VERSION_CODENAME=noble
ID=ubuntu
ID_LIKE=debian
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
UBUNTU_CODENAME=noble
LOGO=ubuntu-logo
root@e0bac4d33c39:/#
```

sudo docker exec -it CONTAINER_ID /bin/bash