

Instalacion Docker:

Paso 1 instalar Docker:

Instalar paquetes necesarios:

```
Terminal - xubu@xubu-VirtualBox: ~
Ficheiro  Editar  Ver  Terminal  Lapelas  Axuda
xubu@xubu-VirtualBox:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-common
```

Añadir CPG KEY:

```
Procesando los dispositivos de man db (2.10.12-1)...
```

```
xubu@xubu-VirtualBox:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```

Añadir el repositorio de Docker a los APT resources:

```
xubu@xubu-VirtualBox:~$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu focal stable"
```

Vamos a asegurarnos de instalar el repositorio de Docker en vez el repositorio de Ubuntu:

```
xubu@xubu-VirtualBox:~$ apt-cache policy docker-ce
```

```
docker-ce:
  Instalado: (ningún)
  Candidato: 5:27.3.1-1~ubuntu.20.04~focal
  Táboa de versións:
```

Y ahora instalamos Docker:

```
xubu@xubu-VirtualBox:~$ sudo apt install docker-ce
```

Comprobamos el estado de Docker:

```
xubu@xubu-VirtualBox:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-09-30 18:40:27 CEST; 4min 3s ago
   TriggeredBy: ● docker.socket
     Docs: https://docs.docker.com
    Main PID: 4377 (dockerd)
      Tasks: 7
     Memory: 22.1M
        CPU: 341ms
    CGroup: /system.slice/docker.service
            └─4377 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Set 30 18:40:26 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:26.359398433+02:00" level=info msg="Starting up"
Set 30 18:40:26 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:26.360874860+02:00" level=info msg="detected 127
Set 30 18:40:26 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:26.528124454+02:00" level=info msg="Loading cont
Set 30 18:40:26 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:26.975244732+02:00" level=info msg="Loading cont
Set 30 18:40:27 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:27.069768695+02:00" level=warning msg="WARNING:
Set 30 18:40:27 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:27.069792084+02:00" level=warning msg="WARNING:
Set 30 18:40:27 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:27.069812267+02:00" level=info msg="Docker daemo
Set 30 18:40:27 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:27.069891719+02:00" level=info msg="Daemon has o
Set 30 18:40:27 xubu-VirtualBox dockerd[4377]: time="2024-09-30T18:40:27.121218056+02:00" level=info msg="API listen o
Set 30 18:40:27 xubu-VirtualBox systemd[1]: Started Docker Application Container Engine.
lines 1-22/22 (END)
```

Hola mundo Docker

Instalar Docker Compose:

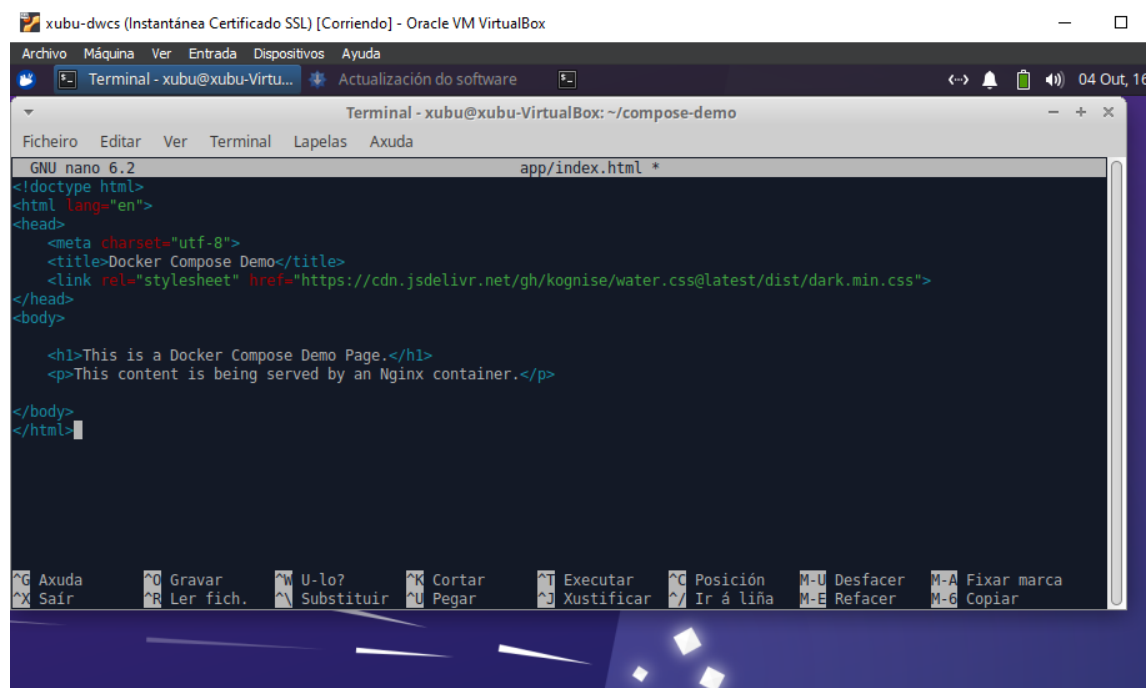
```
xubu@xubu-VirtualBox:~$ curl -SL https://github.com/docker/compose/releases/download/v2.3.3/docker-compose-linux-x86_64 -o ~/
.docker/cli-plugins/docker-compose
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left   Speed
100 24.8M  100 24.8M    0     0  8336k      0  0:00:03  0:00:03 --:--:-- 10.7M
xubu@xubu-VirtualBox:~$ chmod +x ~/.docker/cli-plugins/docker-compose
xubu@xubu-VirtualBox:~$ docker compose version
Docker Compose version v2.3.3
xubu@xubu-VirtualBox:~$
```

Instalamos Docker compose y para comprobarlo vemos la versión que tiene.

Ahora creamos un directorio y dentro hacemos una application folder para que funcione como root para nuestro entorno Nginx, y creamos el html.

```
xubu@xubu-VirtualBox:~$ mkdir ~/compose-demo
mkdir: Non é posíbel crear o directorio "/home/xubu/compose-demo": 0 ficheiro xa existe
xubu@xubu-VirtualBox:~$ mkdir ~/compose-demo
cd ~/compose-demo
mkdir: Non é posíbel crear o directorio "/home/xubu/compose-demo": 0 ficheiro xa existe
xubu@xubu-VirtualBox:~/compose-demo$ mkdir app
mkdir: Non é posíbel crear o directorio "app": 0 ficheiro xa existe
xubu@xubu-VirtualBox:~/compose-demo$ nano app/index.html
```

Creamos un index html con el siguiente contenido:



The screenshot shows a terminal window titled "xubu-dwcs (Instantánea Certificado SSL) [Corriendo] - Oracle VM VirtualBox". The terminal is running the GNU nano 6.2 editor, editing the file "app/index.html". The content of the file is as follows:

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>Docker Compose Demo</title>
  <link rel="stylesheet" href="https://cdn.jsdelivr.net/gh/kognise/water.css@latest/dist/dark.min.css">
</head>
<body>

  <h1>This is a Docker Compose Demo Page.</h1>
  <p>This content is being served by an Nginx container.</p>

</body>
</html>
```

The terminal window also shows a menu bar with various keyboard shortcuts for file operations like "Axuda", "Gravar", "U-lo?", "Cortar", "Executar", "Posición", "Desfacer", "Fixar marca", "Saír", "Ler fich.", "Substituir", "Pegar", "Xustificar", "Ir á liña", "Refacer", and "Copiar".

Creamos el yml file:

```
Terminal - xubu@xubu-VirtualBox: ~/compose-demo
GNU nano 6.2 docker-compose.yml *
version: '3.7'
services:
  web:
    image: nginx:alpine
    ports:
      - "8000:80"
    volumes:
      - ./app:/usr/share/nginx/html
```

Ahora runneamos nuestro entorno:

```
xubu@xubu-VirtualBox:~/compose-demo$ sudo docker compose up -d
[sudo] Contraseña de xubu:
WARN[0000] /home/xubu/compose-demo/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 9/9
✔ web Pulled 8.7s
  ✔ 43c4264eed91 Pull complete 1.4s
  ✔ d1171b13e412 Pull complete 1.7s
  ✔ 596d53a7de88 Pull complete 1.7s
  ✔ f99ac9ba1313 Pull complete 1.8s
  ✔ fd072e74e282 Pull complete 1.8s
  ✔ 379754eea6a7 Pull complete 1.8s
  ✔ 45eb579d59b2 Pull complete 1.8s
  ✔ 472934715761 Pull complete 4.4s
[+] Running 2/2
✔ Network compose-demo_default Created 0.4s
✔ Container compose-demo-web-1 Started 1.3s
```

Verificamos que nuestro entorno esta up:

```
xubu@xubu-VirtualBox:~/compose-demo$ sudo docker compose ps
WARN[0000] /home/xubu/compose-demo/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
NAME                IMAGE              COMMAND                  SERVICE    CREATED          STATUS          PORTS
compose-demo-web-1  nginx:alpine      "/docker-entrypoint...." web        About a minute ago Up About a minute 0.0.0.0:8000->80/tcp, [::]:8000->80/tcp
```

Ahora comprobamos en nuestro navegador que efectivamente funciona:



INSTALACION STACK LAMP:

```
xubu@xubu-VirtualBox:~$ git clone https://github.com/sprintcube/docker-compose-lamp.git
Cloning into 'docker-compose-lamp'...
remote: Enumerating objects: 1025, done.
remote: Counting objects: 100% (309/309), done.
remote: Compressing objects: 100% (77/77), done.
remote: Total 1025 (delta 273), reused 234 (delta 231), pack-reused 716 (from 1)
Receiving objects: 100% (1025/1025), 258.18 KiB | 1.29 MiB/s, feito.
Resolving deltas: 100% (521/521), feito.
xubu@xubu-VirtualBox:~$ cd docker-compose-lamp
xubu@xubu-VirtualBox:~/docker-compose-lamp$ docker-compose up -d
Non foi posibel atopar a orde «docker-compose» pero pode instalarse con:
sudo snap install docker # version 24.0.5, or
sudo apt install docker-compose # version 1.29.2-1
Vexa «snap info docker» para versións adicionais.
```

Clonamos el repositorio de github dentro de nuestra máquina virtual.

Me faltaba el siguiente comando:

```
xubu@xubu-VirtualBox:~/docker-compose-lamp$ cp sample.env .env
```

Y ahora lo instalamos:

```
xubu@xubu-VirtualBox:~/docker-compose-lamp$ sudo docker compose up -d
WARNING[0000] /home/xubu/docker-compose-lamp/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 27/2
  > redis Pulled                                22.2s
  > phpmyadmin Pulled                            30.9s
[+] Building 457.9s (26/26) FINISHED                                docker:default

# Running 4/5
# Network lamp_default Created                                0.0s
# Container lamp_redis Started                               0.0s
# Container lamp-phpmyadmin Starting                       0.0s
# Container lamp-phpmyadmin Created                        0.0s
# Container lamp-phpmyadmin Created                        0.0s
error response from daemon: driver failed programming external connectivity on endpoint lamp-phpmyadmin (918b8abde4f28ad83c87996d4b2a3de1a2287a0947619ebf3046a2c031f390ad): failed to bind port 127.0.0.1:3306/tcp: Error starting userland proxy: listen tcp4 127.0.0.1:3306: bind address already in use
```

Y comprobamos que funciona:

