

Creamos la instancia y nos conectamos a ella.
Tras esto, actualizamos los repositorios.

```
ubuntu@ip-172-31-29-22:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates I
nRelease [126 kB]
```

```
ubuntu@ip-172-31-29-22:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
```

Instalamos los certificados.

```
ubuntu@ip-172-31-29-22:~$ sudo apt install ca-certificates curl gnupg lsb-release
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.
gnupg is already the newest version (2.4.4-2ubuntu17.3).
gnupg set to manually installed.
lsb-release is already the newest version (12.0-2).
lsb-release set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 12 not upgraded.
```

Descargamos la imagen de docker

```
ubuntu@ip-172-31-29-22:~$ sudo mkdir -p /etc/apt/keyrings/
ubuntu@ip-172-31-29-22:~$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -
o /etc/apt/keyrings/docker.gpg
```

Ejecutamos la imagen.

```
ubuntu@ip-172-31-29-22:~$ echo "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docke
r.gpg] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.l
ist.d/docker.list > /dev/null
```

Volvemos a actualizar los repositorios.

```
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Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
```

Instalamos el docker.

```
ubuntu@ip-172-31-29-22:~$ sudo apt install docker-ce docker-ce-cli containerd.io docker-compose-plugin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  docker-buildx-plugin docker-ce-rootless-extras libsllp0 pigz slirp4netns
Suggested packages:
  cgroupfs-mount | cgroup-lite docker-model-plugin
The following NEW packages will be installed:
```

```
ubuntu@ip-172-31-29-22:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
```

Le damos permisos al usuario para el grupo sudoers

```
ubuntu@ip-172-31-29-22:~$ sudo usermod -aG docker ${USER}
```

Instalamos apache2

```
ubuntu@ip-172-31-29-22:~$ sudo apt-get install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap
  libaprutil1t64 liblua5.4-0 ssl-cert
Suggested packages:
```

Creamos el repositorio docker

```
ubuntu@ip-172-31-29-22:~$ sudo docker run -it --name Web -p 8080:80 ubuntu:22.04 /bin/bash
Unable to find image 'ubuntu:22.04' locally
22.04: Pulling from library/ubuntu
af6eca94c810: Pull complete
Digest: sha256:09506232a8004baa32c47d68f1e5c307d648fdd59f5e7eaa42aaf87914100db3
Status: Downloaded newer image for ubuntu:22.04
```

Actualizamos los repositorios y volvemos a instalar apache2 dentro del contenedor docker.

```
root@82d2928af16a:/# apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

Agregamos la regla para HTTP con el puerto 80, en los grupos de seguridad de nuestra instancia en AWS.

EC2 > Grupos de seguridad > sg-0d9fa193ec6e203c4 - launch-wizard-6 > Editar reglas de entrada

Editar reglas de entrada Información

Las reglas de entrada controlan el tráfico entrante que puede llegar a la instancia.

ID de la regla del grupo de seguridad	Tipo <small>Información</small>	Protocolo <small>Información</small>	Intervalo de puertos <small>Información</small>	Origen <small>Información</small>	Descripción: opcional <small>Información</small>	
sgr-044672e42a8f19246	SSH	TCP	22	P... <input type="text" value="0.0.0.0"/>		Eliminar
-	HTTP	TCP	80	A... <input type="text" value="0.0.0.0"/>		Eliminar

[Agregar regla](#)

Iniciamos el servicio apache con el siguiente comando:

```
service apache2 start
```

Y si entramos en el navegador con la IP pública de la instancia, podremos ver apache.



Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in [/usr/share/doc/apache2/README.Debian.gz](#)**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|-- mods-enabled
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
|   |-- *.conf
|-- sites-enabled
|   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.
- They are activated by symlinking available configuration files from their respective `*-available/` counterparts. These should be managed by using our helpers `a2enmod`, `a2dismod`, `a2ensite`, `a2dissite`, and `a2enconf`, `a2disconf`. See their respective man pages for detailed information.
- The binary is called `apache2` and is managed using `systemd`, so to start/stop the service use `systemctl start apache2` and `systemctl stop apache2`, and use `systemctl status apache2` and `journalctl -u apache2` to check status. `system` and `apache2ctl` can also be used for service management if desired. **Calling `/usr/bin/apache2` directly will not work** with the default configuration.

Instalamos el servicio lynx

```
ubuntu@ip-172-31-29-22:~$ sudo apt-get install lynx -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bzip2 lynx-common mailcap
Suggested packages:
```

Abrimos el servidor apache, con el comando lynx y la IP pública de nuestro servidor.

```
ubuntu@ip-172-31-29-22:~$ lynx http://54.242.241.140/
```

```
Ubuntu Logo
Apache2 Default Page
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after installation on Ubuntu systems. It is based on the equivalent page on Debian, from
which the Ubuntu Apache packaging is derived. If you can read this page, it means that
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this file (located at /var/www/html/index.html) before continuing to operate your HTTP
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  all remaining configuration files when starting up the web server.
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a2dismod, a2ensite, a2dissite, and a2enconf, a2disconf . See their respective man
  pages for detailed information.
* The binary is called apache2 and is managed using systemd, so to start/stop the
  service use systemctl start apache2 and systemctl stop apache2, and use systemctl

-- press space for next page --
Arrow keys: Up and Down to move. Right to follow a link; Left to go back.
H)elp O)ptions P)rint G)o M)ain screen Q)uit /=search [delete]=history list
```

Cambiamos el HTML indicando el nombre.

```
root@82d2928af16a:/# echo "Marcos Garcia Rodriguez" > /var/www/html/index.html
```