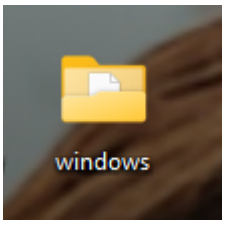
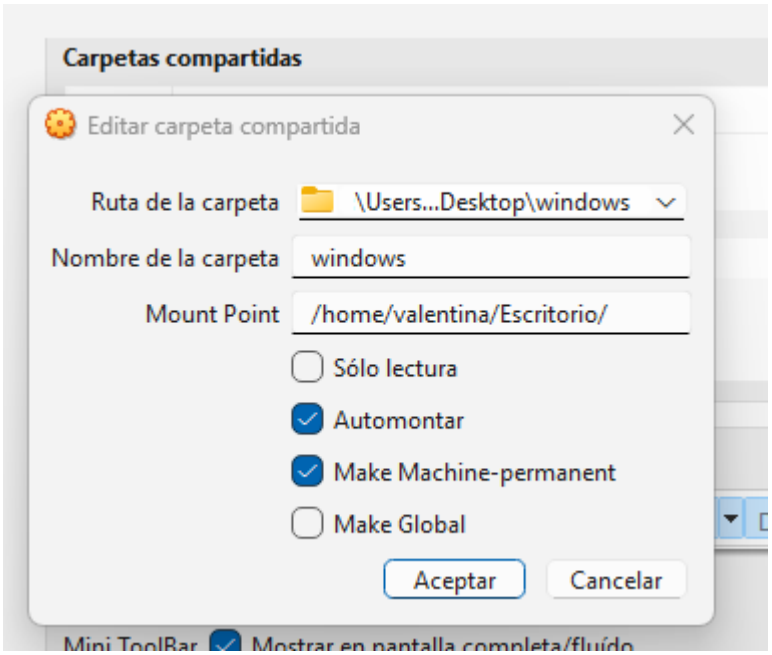
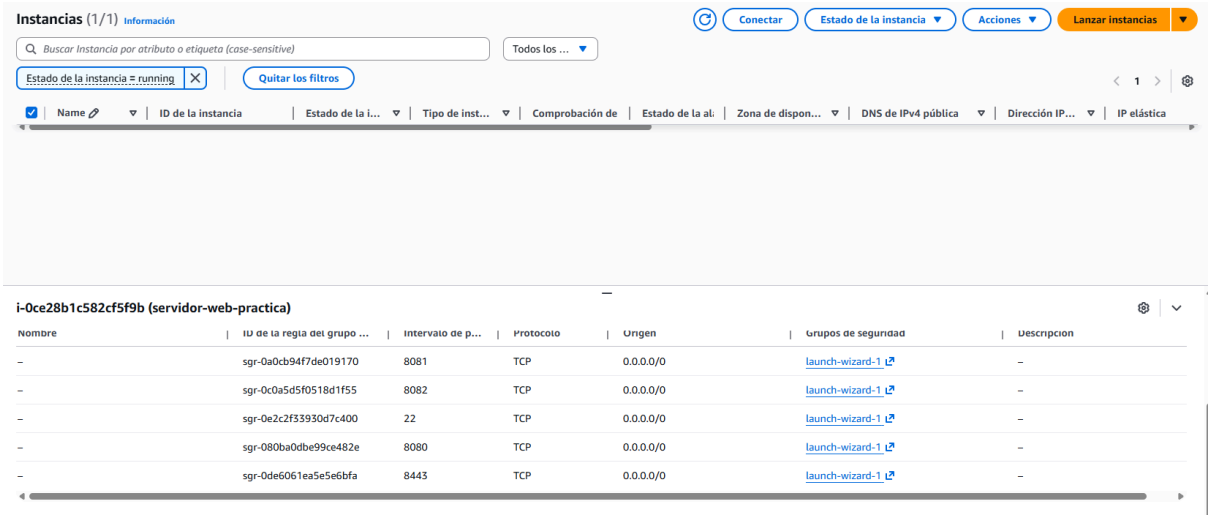
Cree una carpeta compartida



cree una igual en la maquina virtual con el mismo nombre



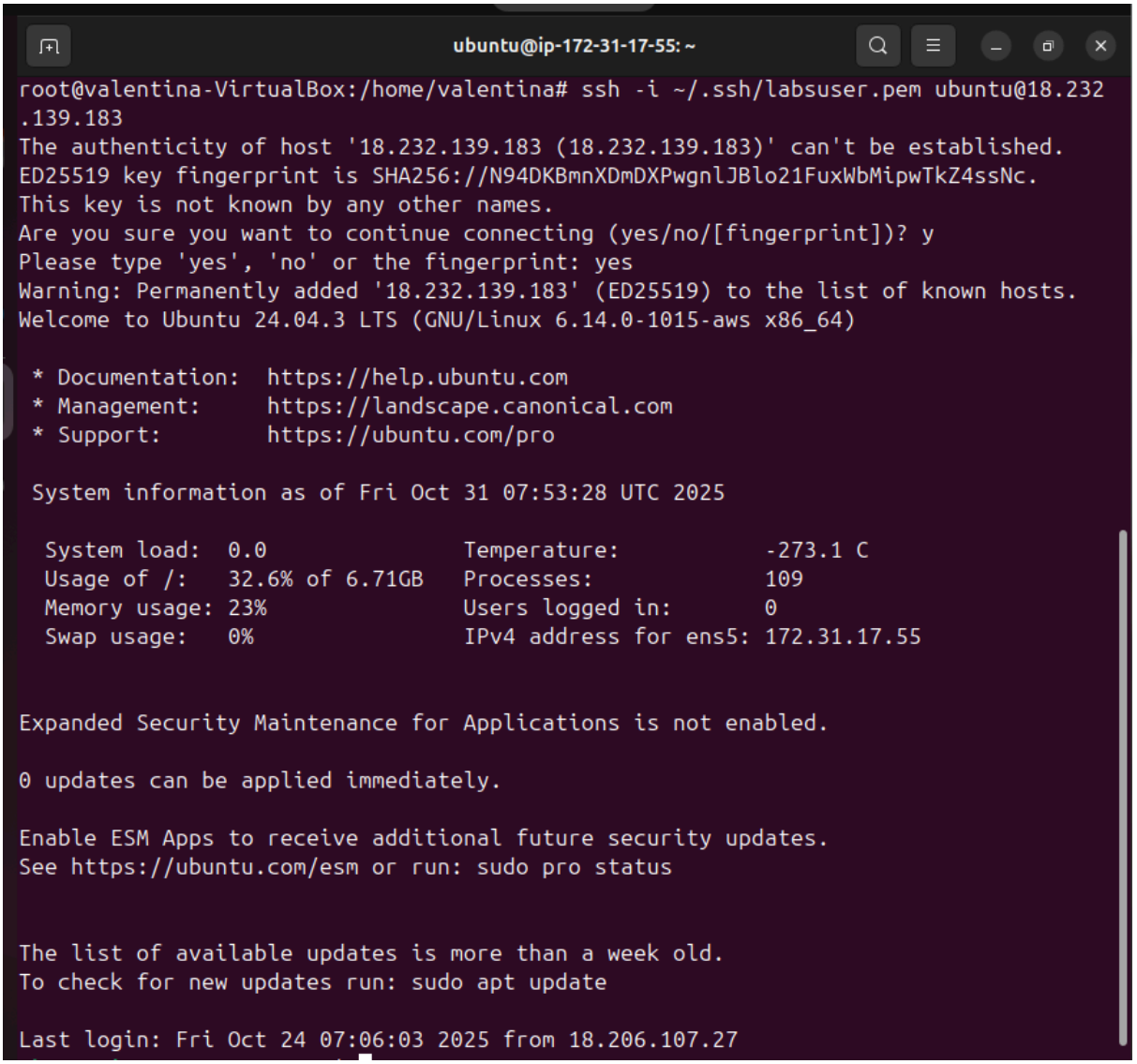


los puertos que cree la clase pasada en la mv de aws

instale esto y el bzip2 tar (o como se llame) para que funcione

```
root@valentina-VirtualBox:/home/valentina# cp /home/valentina/Escritorio/labsuser.p
em ~/.ssh/labsuser.pem
root@valentina-VirtualBox:/home/valentina# mkdir -p ~/.ssh
root@valentina-VirtualBox:/home/valentina# chmod 700 ~/.ssh
root@valentina-VirtualBox:/home/valentina# chmod 400 ~/.ssh/labsuser.pem
root@valentina-VirtualBox:/home/valentina# ls -la ~/.ssh/labsuser.pem
-r-------- 1 root root 1674 oct 31 08:43 /root/.ssh/labsuser.pem
```

moví la llave a una carpeta ssh le otorgue permisos a la carpeta y a la llave y me conecte a través de ssh a la mv en aws



empecé la práctica 2 actualizando la maquina

```
ubuntu@ip-172-31-17-55:~$ sudo apt update && sudo apt upgrade -y
```

instale apache le cambie el puerto

```
ubuntu@ip-172-31-17-55:~$ sudo apt install apache2 -y
```

```
  GNU nano 7.2                    /etc/apache2/ports.conf *
# If you just change the port or add more ports here, you will likely also
# have to change the VirtualHost statement in
# /etc/apache2/sites-enabled/000-default.conf

Listen 8080

<IfModule ssl_module>
        Listen 443
</IfModule>

<IfModule mod_gnutls.c>
        Listen 443
</IfModule>
```

```
  GNU nano 7.2        /etc/apache2/sites-available/000-default.conf *
<VirtualHost *:8080>
        # The ServerName directive sets the request scheme, hostname and port that
        # the server uses to identify itself. This is used when creating
        # redirection URLs. In the context of virtual hosts, the ServerName
        # specifies what hostname must appear in the request's Host: header to
        # match this virtual host. For the default virtual host (this file) this
        # value is not decisive as it is used as a last resort host regardless.
        # However, you must set it for any further virtual host explicitly.
```

Instale las librerias que necesita apache verifique que este activo

```
ubuntu@ip-172-31-17-55:~$ sudo apt install php libapache2-mod-php -y
```

```
ubuntu@ip-172-31-17-55:~$ sudo systemctl restart apache2
ubuntu@ip-172-31-17-55:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: ena>
     Active: active (running) since Fri 2025-10-31 08:00:37 UTC; 19s ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 13292 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCC>
   Main PID: 13295 (apache2)
      Tasks: 6 (limit: 1017)
     Memory: 10.5M (peak: 10.8M)
        CPU: 51ms
     CGroup: /system.slice/apache2.service
             ├─13295 /usr/sbin/apache2 -k start
             ├─13297 /usr/sbin/apache2 -k start
             ├─13298 /usr/sbin/apache2 -k start
             ├─13299 /usr/sbin/apache2 -k start
             ├─13300 /usr/sbin/apache2 -k start
             └─13301 /usr/sbin/apache2 -k start

Oct 31 08:00:37 ip-172-31-17-55 systemd[1]: Starting apache2.service - The Apache >
Oct 31 08:00:37 ip-172-31-17-55 systemd[1]: Started apache2.service - The Apache H>
lines 1-19/19 (END)
```

instale las net-tools para poder usar algunos comandos que necesitaba

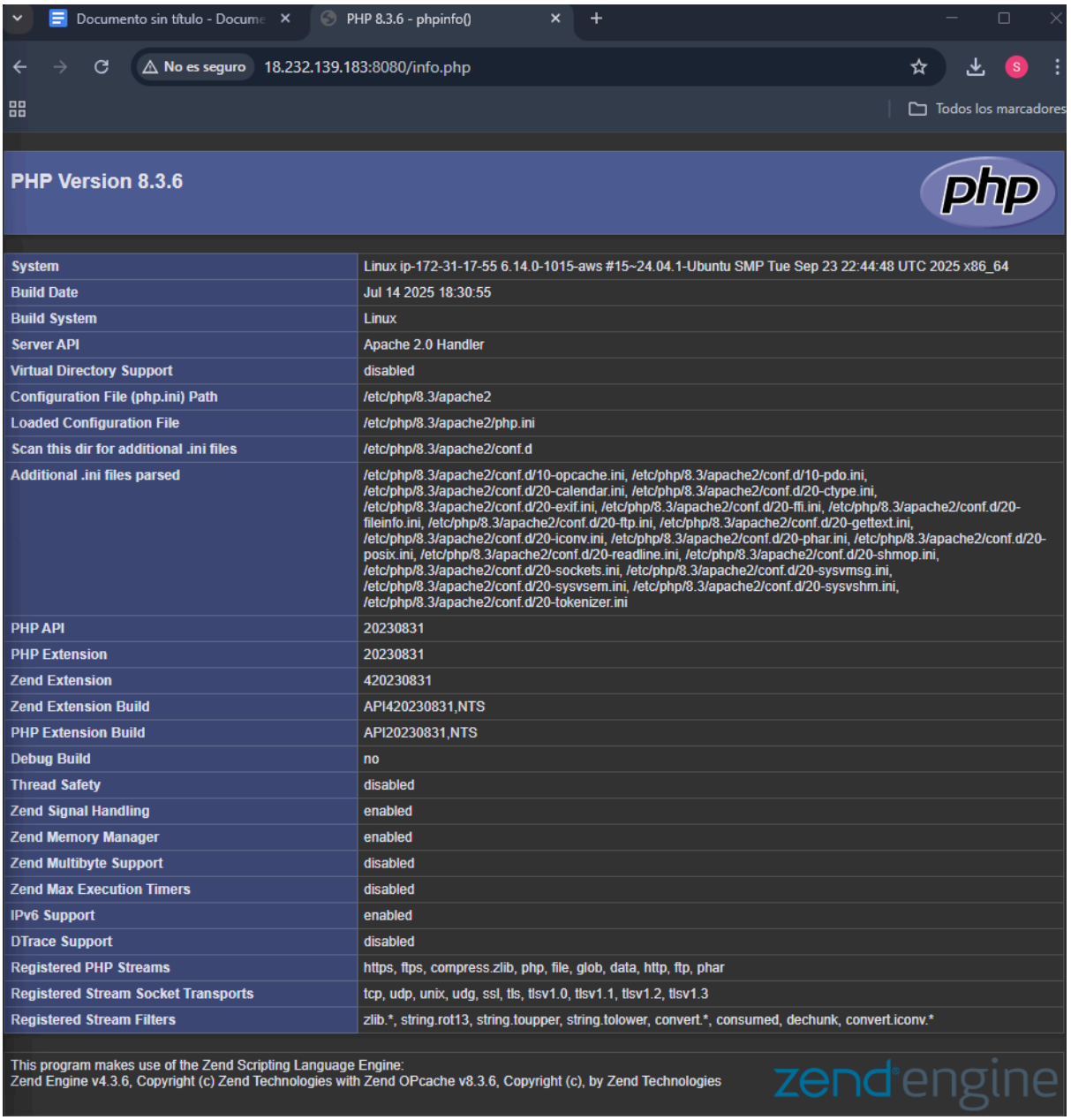
```
ubuntu@ip-172-31-17-55:~$ sudo apt install net-tools
```

verifique que si usa el puerto que le di

```
ubuntu@ip-172-31-17-55:~$ sudo netstat -tulpn | grep -E 8080
tcp6       0      0 :::8080                 :::*                    LISTEN      132
95/apache2
ubuntu@ip-172-31-17-55:~$ echo "<?php phpinfo(); ?>" | sudo tee /var/www/html/info.
php
<?php phpinfo(); ?>
```

verifique que la pagina funcione tanto en terminal como en mi maquina de windows

```
ubuntu@ip-172-31-17-55:~$ curl http://localhost:8080/info.php
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "DTD/xhtml1-transiti
onal.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"><head>
<style type="text/css">
body {background-color: #fff; color: #222; font-family: sans-serif;}
pre {margin: 0; font-family: monospace;}
a:link {color: #009; text-decoration: none; background-color: #fff;}
```



Instale nginx, modifique el puerto que usa

```
</div></body></html>ubuntu@ip-172-31-17-55:~$ sudo apt install nginx -y
Reading package lists... Done
Building dependency tree... Done
```

```
  GNU nano 7.2                /etc/nginx/sites-available/default *
##
# You should look at the following URL's in order to grasp a solid understanding
# of Nginx configuration files in order to fully unleash the power of Nginx.
# https://www.nginx.com/resources/wiki/start/
# https://www.nginx.com/resources/wiki/start/topics/tutorials/config_pitfalls/
# https://wiki.debian.org/Nginx/DirectoryStructure
#
# In most cases, administrators will remove this file from sites-enabled/ and
# leave it as reference inside of sites-available where it will continue to be
# updated by the nginx packaging team.
#
# This file will automatically load configuration files provided by other
# applications, such as Drupal or Wordpress. These applications will be made
# available underneath a path with that package name, such as /drupal8.
#
# Please see /usr/share/doc/nginx-doc/examples/ for more detailed examples.
##

# Default server configuration
#
server {
        listen 8081 default_server;
        listen [::]:8081 default_server;
```

Ayuda

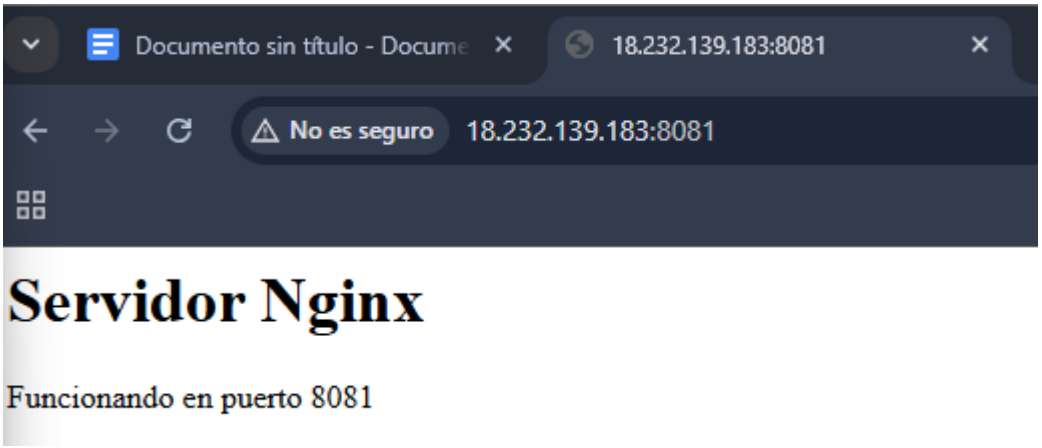
active el servidor nginx verifique sus puertos

```
ubuntu@ip-172-31-17-55:~$ sudo nano /etc/nginx/sites-available/default
ubuntu@ip-172-31-17-55:~$ echo "<h1>Servidor Nginx</h1><p>Funcionando en puerto 808
1</p>" | sudo tee /usr/share/nginx/html/index.html
<h1>Servidor Nginx</h1><p>Funcionando en puerto 8081</p>
ubuntu@ip-172-31-17-55:~$ sudo systemctl restart nginx
ubuntu@ip-172-31-17-55:~$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabl>
     Active: active (running) since Fri 2025-10-31 08:12:43 UTC; 18s ago
       Docs: man:nginx(8)
    Process: 13831 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process>
    Process: 13833 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (cod>
```

```
ubuntu@ip-172-31-17-55:~$ sudo netstat -tulpn | grep -E 8081
tcp        0      0 0.0.0.0:8081            0.0.0.0:*               LISTEN      138
34/nginx: master
tcp6       0      0 :::8081                 :::*                    LISTEN      138
34/nginx: master
ubuntu@ip-172-31-17-55:~$ curl http://localhost:8081
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/T
R/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <!--
    Modified from the Debian original for Ubuntu
    Last updated: 2022-03-22
    See: https://launchpad.net/bugs/1966004
  -->
```

como la primera ruta estaba mal la acomode para que aparezca lo que tiene que decir y comprobé la coneccion tanto en terminal como en mi maquina

```
ubuntu@ip-172-31-17-55:~$ echo "<h1>Servidor Nginx</h1><p>Funcionando en puerto 808
1</p>" | sudo tee /var/www/html/index.html
<h1>Servidor Nginx</h1><p>Funcionando en puerto 8081</p>
ubuntu@ip-172-31-17-55:~$ curl http://localhost:8081
<h1>Servidor Nginx</h1><p>Funcionando en puerto 8081</p>
```



INstale las dependencias necesarias para Caddy

```
ubuntu@ip-172-31-17-55:~$ sudo apt install -y debian-keyring debian-archive-keyring
 apt-transport-https curl
Reading package lists... Done
Building dependency tree... Done
```

```
ubuntu@ip-172-31-17-55:~$ curl -1sLf 'https://dl.cloudsmith.io/public/caddy/stable/
gpg.key' | sudo gpg --dearmor -o /usr/share/keyrings/caddy-stable-archive-keyring.g
pg
ubuntu@ip-172-31-17-55:~$ curl -1sLf 'https://dl.cloudsmith.io/public/caddy/stable/
debian.deb.txt' | sudo tee /etc/apt/sources.list.d/caddy-stable.list
# Source: Caddy
# Site: https://github.com/caddyserver/caddy
# Repository: Caddy / stable
# Description: Fast, multi-platform web server with automatic HTTPS


deb [signed-by=/usr/share/keyrings/caddy-stable-archive-keyring.gpg] https://dl.clo
udsmith.io/public/caddy/stable/deb/debian any-version main

deb-src [signed-by=/usr/share/keyrings/caddy-stable-archive-keyring.gpg] https://dl
.cloudsmith.io/public/caddy/stable/deb/debian any-version main
```

Instalo Caddy

```
ubuntu@ip-172-31-17-55:~$ sudo apt update && sudo apt install caddy -y
```

```
ubuntu@ip-172-31-17-55:~$ sudo mkdir -p /var/www/caddy
ubuntu@ip-172-31-17-55:~$ echo "# Bienvenido a Caddy" | sudo tee /var/www/caddy/REA
DME.md
# Bienvenido a Caddy
ubuntu@ip-172-31-17-55:~$ echo "" | sudo tee -a /var/www/caddy/README.md

ubuntu@ip-172-31-17-55:~$ echo "Este servidor está funcionando correctamente." | su
do tee -a /var/www/caddy/README.md
Este servidor está funcionando correctamente.
ubuntu@ip-172-31-17-55:~$ echo "" | sudo tee -a /var/www/caddy/README.md

ubuntu@ip-172-31-17-55:~$ echo "## Características" | sudo tee -a /var/www/caddy/RE
ADME.md
## Características
ubuntu@ip-172-31-17-55:~$ echo "- Servidor moderno" | sudo tee -a /var/www/caddy/RE
ADME.md
- Servidor moderno
ubuntu@ip-172-31-17-55:~$ echo "- HTTPS automático" | sudo tee -a /var/www/caddy/RE
ADME.md
- HTTPS automático
ubuntu@ip-172-31-17-55:~$ echo "- Fácil configuración" | sudo tee -a /var/www/caddy
/README.md
- Fácil configuración
```

```
ubuntu@ip-172-31-17-55:~$ curl -o /tmp/test-image.jpg "https://www.python.org/stati
c/apple-touch-icon-144x144-precomposed.png"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  7382  100  7382    0     0   184k      0 --:--:-- --:--:-- --:--:--  184k
ubuntu@ip-172-31-17-55:~$ sudo mv /tmp/test-image.jpg /var/www/caddy/test.jpg
```

modifico los puertos que usa

```
  GNU nano 7.2                    /etc/caddy/Caddyfile *
# The Caddyfile is an easy way to configure your Caddy web server.
#
# Unless the file starts with a global options block, the first
# uncommented line is always the address of your site.
#
# To use your own domain name (with automatic HTTPS), first make
# sure your domain's A/AAAA DNS records are properly pointed to
# this machine's public IP, then replace ":80" below with your
# domain name.

:8082 {
        # Set this path to your site's directory.
        root * /var/www/caddy

        # Enable the static file server.
        file_server browse

        # Another common task is to set up a reverse proxy:
        # reverse_proxy localhost:8080
        @markdown path *.md

        # Or serve a PHP site through php-fpm:
        # php_fastcgi localhost:9000
        header @markdown Content-Type text/plain
}
```

Inicio el servidor, verifique que esta activo, verifique los puertos que esta usando

```
ubuntu@ip-172-31-17-55:~$ sudo systemctl restart caddy
ubuntu@ip-172-31-17-55:~$ sudo systemctl status caddy
● caddy.service - Caddy
     Loaded: loaded (/usr/lib/systemd/system/caddy.service; enabled; preset: enabl>
     Active: active (running) since Fri 2025-10-31 08:28:09 UTC; 15s ago
       Docs: https://caddyserver.com/docs/
   Main PID: 14731 (caddy)
      Tasks: 7 (limit: 1017)
     Memory: 10.9M (peak: 11.1M)
        CPU: 73ms
     CGroup: /system.slice/caddy.service
             └─14731 /usr/bin/caddy run --environ --config /etc/caddy/Caddyfile
```

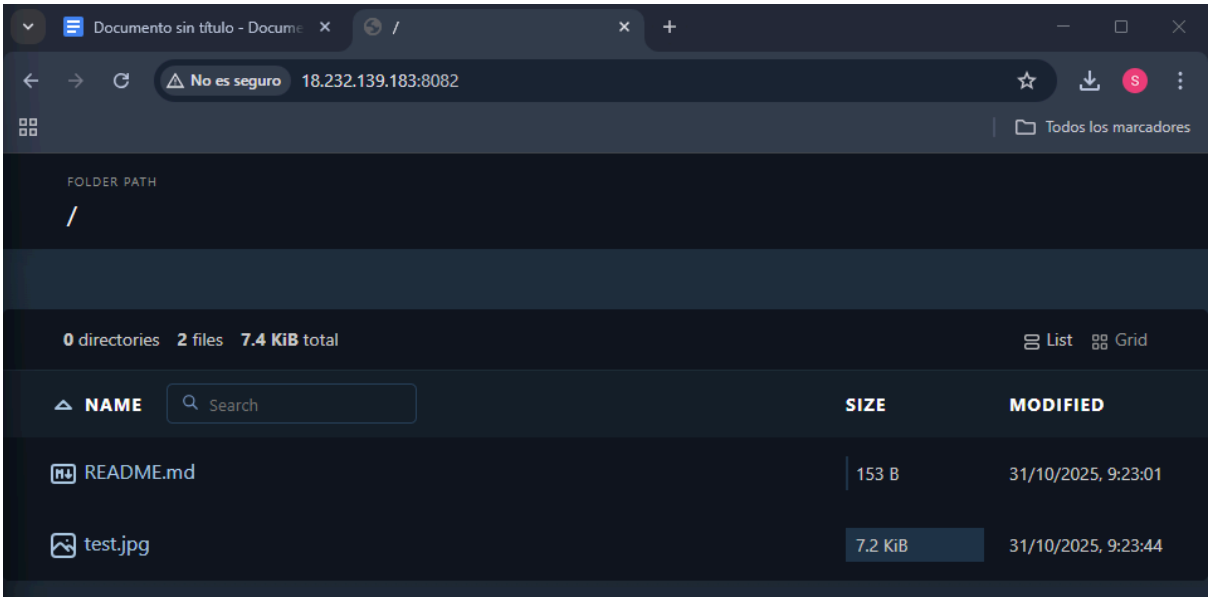
```
ubuntu@ip-172-31-17-55:~$ sudo netstat -tulpn | grep -E 8082
tcp6       0      0 :::8082                 :::*                    LISTEN      147
31/caddy
```

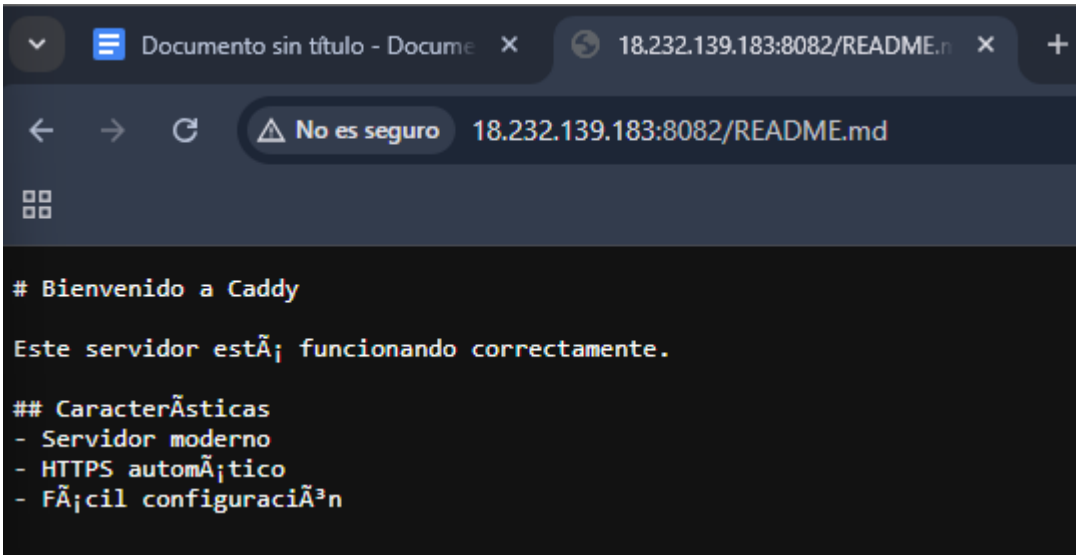
Verifique la coneccion

```
ubuntu@ip-172-31-17-55:~$ curl http://localhost:8082/

<!DOCTYPE html>
<html>
<head>
                <title>/</title>
                <link rel="canonical" href="//"  />
                <meta charset="utf-8">
                <meta name="color-scheme" content="light dark">
                <meta name="viewport" content="width=device-width, initial-scale=1.
0">
```

Papelera

```
ubuntu@ip-172-31-17-55:~$ curl http://localhost:8082/README.md
# Bienvenido a Caddy

Este servidor está funcionando correctamente.

## Características
- Servidor moderno
- HTTPS automático
- Fácil configuración
```





Instale lo que se necesita para el certificado ssl

```
ubuntu@ip-172-31-17-55:~$ sudo apt install certbot python3-certbot-apache -y
```

Creamos el certificado

```
ubuntu@ip-172-31-17-55:~$ sudo openssl req -x509 -nodes -days 365 -newkey rsa:2048
-keyout /etc/ssl/private/apache-selfsigned.key -out /etc/ssl/certs/apache-selfsigne
d.crt
...+..+.......+..+....+.....+.++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++*..........+......+.+...+..+....+.........+................+.......+..
.........+.........+......+.+.....+...+.......+...+..+.+........+..........+.......
..+..+....+............+..+..........+.....+......++++++++++++++++++++++++++++++++
++++++++++++++++++++++++++++++*..+.................+................+....+...+.
..+.................+...+.........+...+.......+............+........+............+.
+........+.+.....+.........+....+.....+.+..+....+...+..+...+......+................
.....+.+..+.+...........+...+.......+..........+............+............+..+...+
```

```
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:ES
State or Province Name (full name) [Some-State]:Madrid
Locality Name (eg, city) []:Madrid
Organization Name (eg, company) [Internet Widgits Pty Ltd]:
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:localhost
Email Address []:valensiulay@gmail.com
```

Habilito el modulo SSL

```
ubuntu@ip-172-31-17-55:~$ sudo a2enmod ssl
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create self
-signed certificates.
To activate the new configuration, you need to run:
  systemctl restart apache2
```

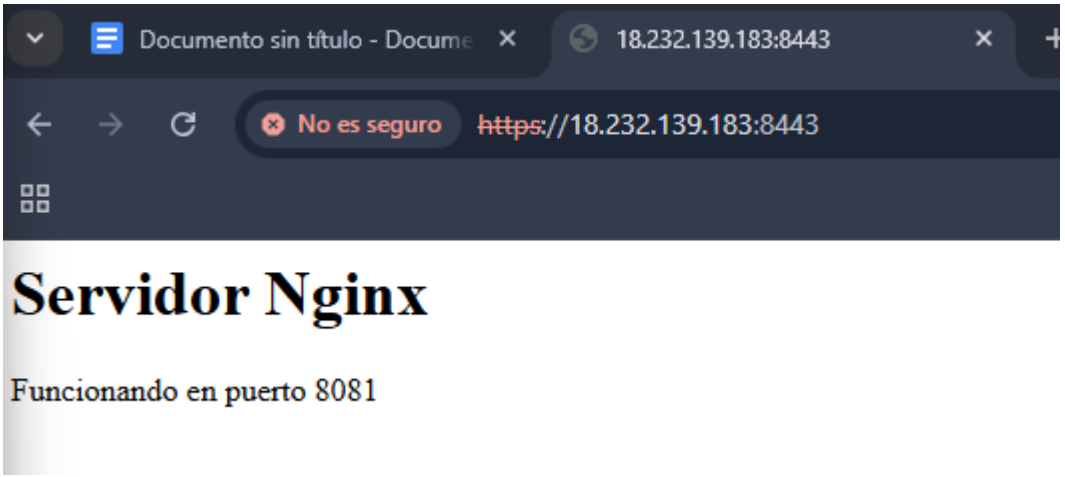
Cambio los puertos

```
ubuntu@ip-172-31-17-55: ~
  GNU nano 7.2                    /etc/apache2/ports.conf *
# If you just change the port or add more ports here, you will likely also
# have to change the VirtualHost statement in
# /etc/apache2/sites-enabled/000-default.conf

Listen 8080
Listen 8443

<IfModule ssl_module>
        Listen 443
</IfModule>

<IfModule mod_gnutls.c>
        Listen 443
</IfModule>
```

```
  GNU nano 7.2        /etc/apache2/sites-available/default-ssl.conf *
<VirtualHost *:8443>
        ServerAdmin webmaster@localhost
```

Activo la configuración SSL en apache, activo el servidor, veo que esta activo y verifico la coneccion

```
ubuntu@ip-172-31-17-55:~$ sudo a2ensite default-ssl.conf
Enabling site default-ssl.
To activate the new configuration, you need to run:
  systemctl reload apache2
ubuntu@ip-172-31-17-55:~$ sudo systemctl restart apache2
ubuntu@ip-172-31-17-55:~$ curl -i -k https://localhost:8443
HTTP/1.1 200 OK
Date: Fri, 31 Oct 2025 08:47:46 GMT
Server: Apache/2.4.58 (Ubuntu)
Last-Modified: Fri, 31 Oct 2025 08:16:21 GMT
ETag: "39-6426ffb11443b"
Accept-Ranges: bytes
Content-Length: 57
Content-Type: text/html

<h1>Servidor Nginx</h1><p>Funcionando en puerto 8081</p>
```



Aca se pueden ver los servidores activos y los puertos que estan utilizando.

```
ubuntu@ip-172-31-17-55:~$ sudo systemctl status apache2 nginx caddy
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: ena>
     Active: active (running) since Fri 2025-10-31 08:47:27 UTC; 2min 58s ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 15212 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCC>
   Main PID: 15213 (apache2)
      Tasks: 7 (limit: 1017)
     Memory: 13.3M (peak: 13.8M)
        CPU: 93ms
     CGroup: /system.slice/apache2.service
             ├─15213 /usr/sbin/apache2 -k start
             ├─15215 /usr/sbin/apache2 -k start
             ├─15216 /usr/sbin/apache2 -k start
             ├─15217 /usr/sbin/apache2 -k start
             ├─15218 /usr/sbin/apache2 -k start
             ├─15219 /usr/sbin/apache2 -k start
             └─15221 /usr/sbin/apache2 -k start

Oct 31 08:47:27 ip-172-31-17-55 systemd[1]: Starting apache2.service - The Apache >
Oct 31 08:47:27 ip-172-31-17-55 systemd[1]: Started apache2.service - The Apache H>

● nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabl>
     Active: active (running) since Fri 2025-10-31 08:12:43 UTC; 37min ago
       Docs: man:nginx(8)
   Main PID: 13834 (nginx)
      Tasks: 3 (limit: 1017)
     Memory: 2.4M (peak: 2.7M)
        CPU: 22ms
     CGroup: /system.slice/nginx.service
             ├─13834 "nginx: master process /usr/sbin/nginx -g daemon on; master_p>
             ├─13835 "nginx: worker process"
             └─13836 "nginx: worker process"

● caddy.service - Caddy
     Loaded: loaded (/usr/lib/systemd/system/caddy.service; enabled; preset: enabl>
     Active: active (running) since Fri 2025-10-31 08:28:09 UTC; 22min ago
       Docs: https://caddyserver.com/docs/
   Main PID: 14731 (caddy)
      Tasks: 7 (limit: 1017)
     Memory: 9.8M (peak: 11.8M)
        CPU: 115ms
     CGroup: /system.slice/caddy.service
             └─14731 /usr/bin/caddy run --environ --config /etc/caddy/Caddyfile

ubuntu@ip-172-31-17-55:~$ sudo netstat -tulpn | grep -E '8080|8081|8082|8443'
tcp        0      0 0.0.0.0:8081            0.0.0.0:*               LISTEN      138
34/nginx: master
tcp6       0      0 :::8443                 :::*                    LISTEN      152
13/apache2
tcp6       0      0 :::8080                 :::*                    LISTEN      152
13/apache2
tcp6       0      0 :::8081                 :::*                    LISTEN      138
34/nginx: master
tcp6       0      0 :::8082                 :::*                    LISTEN      147
31/caddy
```