PARTE 1:

1. Actualizar el Sistema

```
root@ubuntujuan1:/home/vboxuser# apt update
Hit:1 http://es.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:3 http://es.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:4 http://es.archive.ubuntu.com/ubuntu noble-backports InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
84 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

```
root@ubuntujuan1:/home/vboxuser# apt upgrade -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
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:
    libllvm20
The following upgrades have been deferred due to phasing:
    gdm3 gir1.2-gdm-1.0 libgdm1 libwireplumber-0.4-0 systemd-hwe-hwdb tcpdump wireplumber
The following packages will be upgraded:
```

2.Instalar Apache2

```
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.58-1ubuntu8.8).
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 7 not upgraded.
```

3. Configuración de apache2 en puerto 8080

4. Modificar Virtual Host

5.Instalación PHP

```
root@ubuntujuan1:/home/vboxuser# apt install php libapache2-mod-php -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
   libllvm19
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
   libapache2-mod-php8.3 libsodium23 php-common php8.3 php8.3-cli php8.3-common php8.3-opc
Suggested packages:
   php-pear
```

6.Reiniciar apache2

```
root@ubuntujuan1:/home/vboxuser# systemctl restart apache2
```

7. Verificar estado de apache2

```
root@ubuntujuan1:/home/vboxuser# systemctl status apache2

apache2.service - The Apache HTTP Server

Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)

Active: active (running) since Fri 2025-10-10 07:28:36 UTC; 43s ago

Docs: https://httpd.apache.org/docs/2.4/

Process: 25471 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)

Main PID: 25474 (apache2)

Tasks: 6 (limit: 4604)

Memory: 10.6M (peak: 11.0M)

CPU: 42ms

CGroup: /system.slice/apache2.service

-25474 /usr/sbin/apache2 -k start

-25476 /usr/sbin/apache2 -k start

-25477 /usr/sbin/apache2 -k start

-25478 /usr/sbin/apache2 -k start

-25479 /usr/sbin/apache2 -k start

-25480 /usr/sbin/apache2 -k start
```

8. Crear archivo PHP de prueba

root@ubuntujuan1:/home/vboxuser# echo "<?php phpinfo(); ?>" | sudo tee /var/www/html/info.php
<?php phpinfo(); ?>

9.Probar apache2

PHP Version 8.3.6	php
System	Linux ubuntujuan1 6.14.0-33-generic #33~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Sep 19 17:02:30 UTC 2 x86_64
Build Date	Jul 14 2025 18:30:55
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.3/apache2
Loaded Configuration File	/etc/php/8.3/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.3/apache2/conf.d
Additional .ini files parsed	/etc/php/8.3/apache2/conf.d/10-opcache.ini, /etc/php/8.3/apache2/conf.d/10-pdo.ini, /etc/php/8.3/apache2/conf.d/20-calendar.ini, /etc/php/8.3/apache2/conf.d/20-calendar.ini, /etc/php/8.3/apache2/conf.d/20-fileini, /etc/php/8.3/apache2/conf.d/20-fileinio.ini, /etc/php/8.3/apache2/conf.d/20-fileinio.ini, /etc/php/8.3/apache2/conf.d/20-fip.ini, /etc/php/8.3/apache2/conf.d/20-fip.ini, /etc/php/8.3/apache2/conf.d/20-phar.ini, /etc/php/8.3/apache2/conf.d/20-posix.ini, /etc/php/8.3/apache2/conf.d/20-sms.ini, /etc/php/8.3/apache2/conf.d/20-swsvsem.ini, /etc/php/8.3/apache2/conf.d/20-sysvsem.ini,
PHP API	20230831
PHP Extension	20230831
Zend Extension	420230831
Zend Extension Build	API420230831,NTS
PHP Extension Build	API20230831,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled

PARTE 2:

1.Instalar Nginx

```
root@ubuntujuan1:/home/vboxuser# apt install nginx -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
 libllvm19
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
 nginx-common
Suggested packages:
  fcgiwrap nginx-doc
The following NEW packages will be installed:
 nginx nginx-common
0 upgraded, 2 newly installed, 0 to remove and 7 not upgraded.
Need to get 564 kB of archives.
After this operation, 1,596 kB of additional disk space will be used.
Get:1 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx-common all 1.24.0-2ubuntu7.5 [43.4
Get:2 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx amd64 1.24.0-2ubuntu7.5 [520 kB]
```

2. Configurar Nginx en puerto 8081

```
GNU nano 7.2 /etc/nginx/sites-available/default *

# 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;
```

3. Crear página HTML personalizada

root@ubuntujuan1:/home/vboxuser# echo "<h1>Scrvidor Nginx</h1>Funcionando en puerto 8081" | sudo tee ginx/html/index.html <h1>Scrvidor Nginx</h1>Funcionando en puerto 8081

4. Reiniciar Nginx

root@ubuntujuan1:/home/vboxuser# systemctl restart nginx

5. Verificar estado Nginx

```
root@ubuntujuan1:/home/vboxuser# 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: enabled)
     Active: active (running) since Fri 2025-10-10 07:59:07 UTC; 29s ago
       Docs: man:nginx(8)
    Process: 27227 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, statu
    Process: 27229 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUCCE
   Main PID: 27231 (nginx)
      Tasks: 3 (limit: 4604)
     Memory: 2.4M (peak: 2.8M)
        CPU: 12ms
     CGroup: /system.slice/nginx.service
              —27231 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
—27232 "nginx: worker process"
              27233 "nginx: worker process'
Oct 10 07:59:07 ubuntujuan1 systemd[1]: Starting nginx.service - A high performance web server and a rever
Oct 10 07:59:07 ubuntujuan1 systemd[1]: Started nginx.service - A high performance web server and a revers
```

6. Probar Nginx en terminal

PARTE 3:

1.Instalar dependencias necesarias

```
root@ubuntujuan1:/home/vboxuser# apt install -y debian-keyring debian-archive-keyring apt-transport-http
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
curl is already the newest version (8.5.0-2ubuntu10.6).
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 debian-archive-keyring debian-keyring
0 upgraded, 3 newly installed, 0 to remove and 7 not upgraded.
Need to get 31.5 MB of archives.
After this operation, 33.4 MB of additional disk space will be used.
Get:1 http://es.archive.ubuntu.com/ubuntu noble-updates/universe amd64 apt-transport-https all 2.8.3 [3,
Get:2 http://es.archive.ubuntu.com/ubuntu noble/universe amd64 debian-archive-keyring all 2023.4ubuntu1
Get:3 http://es.archive.ubuntu.com/ubuntu noble/universe amd64 debian-keyring all 2023.12.24 [31.3 MB] Fetched 31.5 MB in 15s (2,139 kB/s)
Selecting previously unselected package apt-transport-https.
(Reading database ... 151074 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_2.8.3_all.deb ...
Unpacking apt-transport-https (2.8.3) ..
Selecting previously unselected package debian-archive-keyring.
Preparing to unpack .../debian-archive-keyring_2023.4ubuntu1_all.deb ...
Unpacking debian-archive-keyring (2023.4ubuntu1) ...
Selecting previously unselected package debian-keyring.
Preparing to unpack .../debian-keyring_2023.12.24_all.deb ...
Unpacking debian-keyring (2023.12.24) ...
Setting up apt-transport-https (2.8.3) ...
Setting up debian-archive-keyring (2023.4ubuntu1) ...
Setting up debian-keyring (2023.12.24) ...
```

2. Agregar repositorio de Caddy

root@ubuntujuan1:/home/vboxuser# curl -1slf 'https://dl.cloudsmith.io/public/caddy/stable/gpg.key' | sudo gpg --dearmor
-o /usr/share/keyrings/caddy-stable-archive-keyring.gpg

```
root@ubuntujuan1:/home/vboxuser# curl -1sLf 'https://dl.cloudsmith.io/public/caddy/stable/debian.deb.txt' | sudo tee /c/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.cloudsmith.io/public/caddy/stable/dbian any-version main

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

3. Actualizar e Instalar Caddy

```
root@ubuntujuan1:/home/vboxuser# apt update && sudo apt install caddy -y
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:2 http://es.archive.ubuntu.com/ubuntu noble InRelease
Get:3 https://dl.cloudsmith.io/public/caddy/stable/deb/debian any-version InRelease [14.8
Hit:4 http://es.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:5 http://es.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:6 https://dl.cloudsmith.io/public/caddy/stable/deb/debian any-version/main amd64 Pack
Fetched 19.1 kB in 1s (37.3 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
7 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
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:
  caddy
0 upgraded, 1 newly installed, 0 to remove and 7 not upgraded.
Need to get 16.0 MB of archives.
After this operation, 44.5 MB of additional disk space will be used.
Get:1 https://dl.cloudsmith.io/public/caddy/stable/deb/debian any-version/main amd64 cadd
```

4. Crear directorio para Caddy

root@ubuntujuan1:/home/vboxuser# mkdir -p /var/www/caddy

5. Crear archivo Markdown de prueba

6.Crear imagen de prueba

```
root@ubuntujuan1:/home/vboxuser# curl -o /tmp/test-image.jpg "https://www.python.org/static/apple-touch-icon-144x144-precomposed.png" curl: (3) URL rejected: Malformed input to a URL function
```

7. Crear Caddyfile personalizada

```
GNU nano 7.2

# 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.

:80 {

# Set this path to your site's directory.
root * /usr/share/caddy

# Enable the static file server.
file_server

# Another common task is to set up a reverse proxy:
# reverse_proxy localhost:8080

# Or serve a PHP site through php-fpm:
# php_fastcgi localhost:9000
}

# Refer to the Caddy docs for more information:
# https://caddyserver.com/docs/caddyfile

:8082 {
root * /var/www/caddy
file_server browse
@markdown path *.md
header @markdown Content-Type text/plain
}
```

8. Reiniciar Caddy

root@ubuntujuan1:/home/vboxuser# systemctl restart caddy

9. Verificar estado Caddy

```
root@ubuntujuan1:/home/vboxuser# systemctl status caddy
caddy.service - Caddy
     Loaded: loaded (/usr/lib/systemd/system/caddy.service; enabled; preset: enabled)
     Active: active (running) since Fri 2025-10-10 08:40:37 UTC; 35s ago
       Docs: https://caddyserver.com/docs/
   Main PID: 29965 (caddy)
      Tasks: 7 (limit: 4604)
     Memory: 12.0M (peak: 12.4M)
        CPU: 71ms
     CGroup: /system.slice/caddy.service
              -29965 /usr/bin/caddy run --environ --config /etc/caddy/Caddyfile
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6034951,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"warn","ts":1760085637.6035237,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"warn","ts":1760085637.6035259,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6035273,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6037712,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.603982,"msg":"a
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6040437,"msg":
Oct 10 08:40:37 ubuntujuan1 systemd[1]: Started caddy.service - Caddy.
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6094387,"logger
Oct 10 08:40:37 ubuntujuan1 caddy[29965]: {"level":"info","ts":1760085637.6095512,"logger
      1.31/31 /FND\
```

10. Probar Caddy desde terminal



11. Probar archivo Markdown

```
root@ubuntujuan1:/home/vboxuser# curl http://localhost:8082/README.md
# Bienvenido a Caddy

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

PARTE 4:

1.Instalar Certbot y el plugin de Apache

```
root@ubuntujuan1:/home/vboxuser# apt install certbot python3-certbot-apache -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  libllvm19
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  augeas-lenses libaugeas0 python3-acme python3-augeas python3-certbot python3-configargp
  python3-josepy python3-openssl python3-parsedatetime python3-rfc3339
Suggested packages:
  augeas-doc python-certbot-doc python3-certbot-nginx augeas-tools python-acme-doc python
  python-openssl-doc python3-openssl-dbg
The following NEW packages will be installed:
  augeas-lenses certbot libaugeas0 python3-acme python3-augeas python3-certbot python3-ce
  python3-configargparse python3-icu python3-josepy python3-openssl python3-parsedatetime
0 upgraded, 13 newly installed, 0 to remove and 7 not upgraded.
Need to get 1,705 kB of archives.
After this operation, 8,858 kB of additional disk space will be used.
Get:1 http://es.archive.ubuntu.com/ubuntu_noble/universe_amd64_a
```

2. Verificar dominio o localhost

```
Country Name (2 letter code) [AU]:ES
State or Province Name (full name) [Some-State]:ES
Locality Name (eg, city) []:madrid
Organization Name (eg, company) [Internet Widgits Pty Ltd]:madrid
Organizational Unit Name (eg, section) []:localhost
Common Name (e.g. server FQDN or YOUR name) []:localhost
Email Address []:juan@gmail.com
```

3. Habilitar modulo SSL Apache

```
root@ubuntujuan1:/home/vboxuser# 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
root@ubuntujuan1:/home/vboxuser#
```

4. Crear configuración SSL para Apache

```
</VirtualHost>

*:443>:
SSLEngine on
SSLCertificateFile /etc/ssl/certs/apache-selfsigned.crt
SSLCertificateKeyFile /etc/ssl/private/apache-selfsigned.key
```

5. Cambiar puerto SSL

```
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>

Listen 443

</IfModule mod_gnutls.c>
    Listen 443

</IfModule>
```

6. Modificar Virtualhost SSL

```
VirtualHost *:8443>
    ServerAdmin webmaster@localhost

DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf

# SSL Engine Switch:
# Enable/Disable SSL for this virtual host.
SSLEngine on

# A self-signed (snakeoil) certificate can be created by installing
# the ssl-cert package. See
# /usr/share/doc/apache2/README.Debian.gz for more info.

[ Read 101 lines ]

**G Help **O Write Out **N Where Is **N Cut **T Execute **C Location **A Read File **N Replace **N Paste **O Justify **N Go To Line*
```

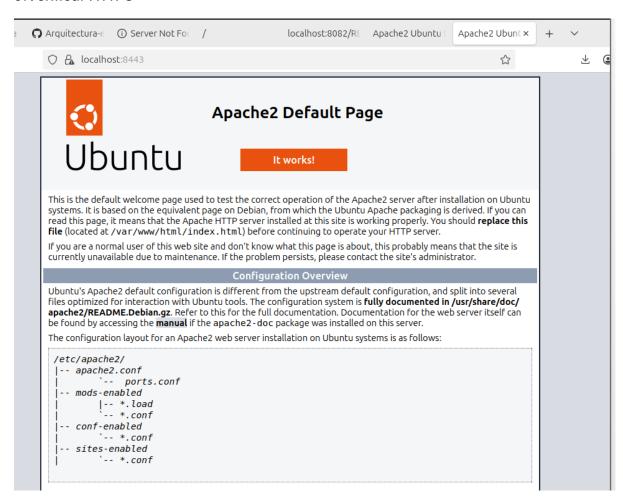
7. Habilitar sitio SSL

root@ubuntujuan1:/home/vboxuser# sudo a2ensite default-ssl.conf
Site default-ssl already enabled

8. Reiniciar Apache

root@ubuntujuan1:/home/vboxuser# systemctl restart apache2

9. Verificar HTTPS



```
root@ubuntujuan1:/home/vboxuser# curl -i -k https://localhost:8443
HTTP/1.1 200 OK
Date: Fri, 10 Oct 2025 09:01:58 GMT
Server: Apache/2.4.58 (Ubuntu)
Last-Modified: Fri, 10 Oct 2025 07:20:20 GMT
ETag: "29af-640c8c01782e1"
Accept-Ranges: bytes
Content-Length: 10671
Vary: Accept-Encoding
Content-Type: text/html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtm
<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
 <head>
```

PARTE 5:

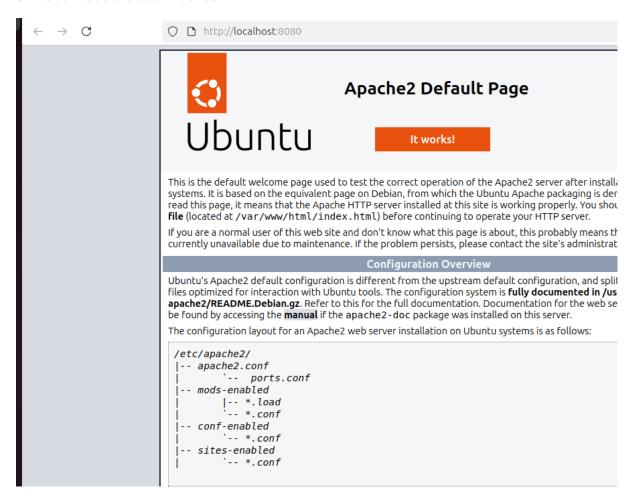
1.

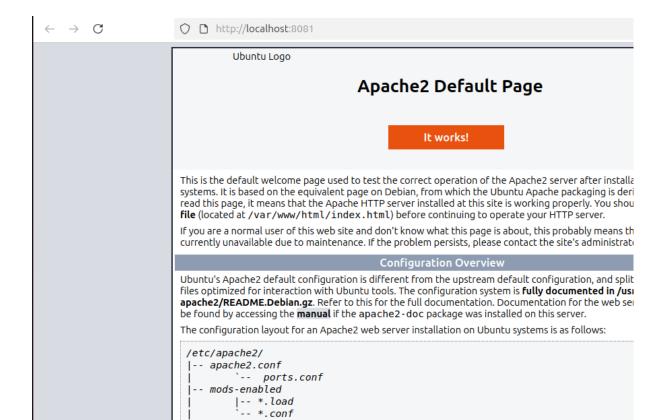
```
root@ubuntujuan1:/home/vboxuser# systemctl status apache2 nginx caddy
apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
     Active: active (running) since Fri 2025-10-10 09:01:12 UTC; 5min ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 31067 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
  Main PID: 31071 (apache2)
     Tasks: 8 (limit: 4604)
     Memory: 14.3M (peak: 14.5M)
        CPU: 86ms
     CGroup: /system.slice/apache2.service
              -31071 /usr/sbin/apache2 -k start
              —31073 /usr/sbin/apache2 -k start
               -31074 /usr/sbin/apache2 -k start
              —31075 /usr/sbin/apache2 -k start
              -31076 /usr/sbin/apache2 -k start
              -31076 /usr/sbin/apache2 -k start
-31077 /usr/sbin/apache2 -k start
              -31191 /usr/sbin/apache2 -k start
             -31474 /usr/sbin/apache2 -k start
Oct 10 09:01:12 ubuntujuan1 systemd[1]: Starting apache2.service - The Apache HTTP Serve
Oct 10 09:01:12 ubuntujuan1 apachectl[31070]: AH00558: apache2: Could not reliably deter
Oct 10 09:01:12 ubuntujuan1 systemd[1]: Started apache2.service - The Apache HTTP Server
nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
     Active: active (running) since Fri 2025-10-10 07:59:07 UTC; 1h 7min ago
       Docs: man:nginx(8)
  Main PID: 27231 (nginx)
     Tasks: 3 (limit: 4604)
     Memory: 2.4M (peak: 2.8M)
       CPU: 14ms
```

2. Verificar puertos en uso

```
root@ubuntujuan1:/home/vboxuser# netstat -tulpn | grep -E '8080|8081|8082|8443'
tcp
           0
                  0 0.0.0.0:8081
                                             0.0.0.0:*
                                                                      LISTEN
                                                                                  27231/ngi
           0
                                                                      LISTEN
tcp6
                                             :::*
                                                                                  31071/apa
           0
                                                                      LISTEN
                                                                                  29965/cad
tcp6
           0
                                                                      LISTEN
                                                                                  31071/apa
tcp6
           0
                                                                      LISTEN
                                                                                  27231/ngi
tcp6
root@ubuntujuan1:/home/vboxuser#
```

3. Probar todos los servidores





-- conf-enabled

-- sites-enabled

`-- *.conf

`-- *.conf







Apache2 Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after install systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is der read this page, it means that the Apache HTTP server installed at this site is working properly. You shot 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 the currently unavailable due to maintenance. If the problem persists, please contact the site's administrat

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and splil files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /us apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web se 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
| `-- *.conf
|-- conf-enabled
| `-- *.conf
|-- sites-enabled
| `-- *.conf
```