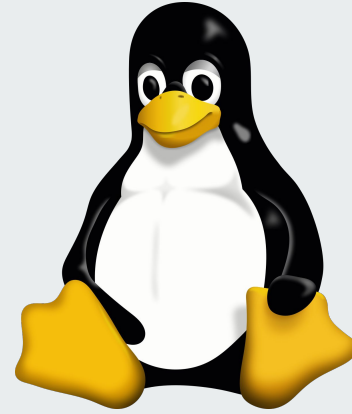


# TEMA 6

## EJERCICIO 6

Iñigo Martín de la vega



# Pasos a realizar

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1. Actualizar a la ultima versión de Ubuntu Server
2. Instalar apache
3. Hostear nuestra pagina WEB
4. Instalar y gestionar modulos

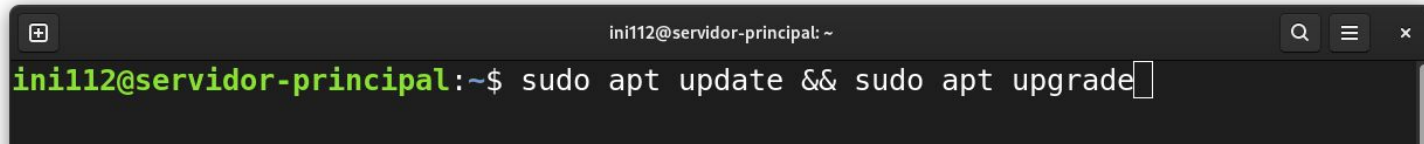
```
);  
function(){cards();});  
  
dow).width();  
  
reen();  
  
n();  
  
screen(){  
  .card').length;  
  
i<=cards;i++){  
  $("."card:nth-of-type(" + i + ")").  
    .html(cards[i].card);  
}
```

# Actualizar Ubuntu Server

---

## Paso 1 Actualizar e Instalar

- Escribir el comando:

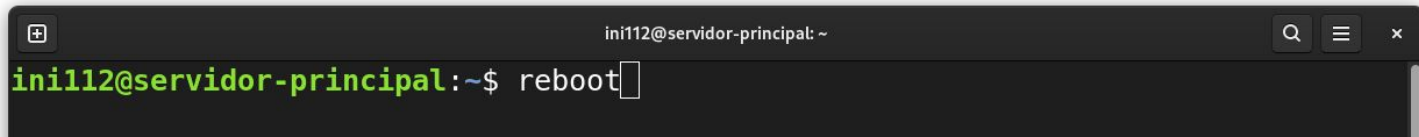
A terminal window with a dark background. The title bar at the top reads 'ini112@servidor-principal: ~'. On the left is a window control icon (a square with a plus sign). On the right are search, menu, and close icons. The terminal text shows the prompt 'ini112@servidor-principal:~\$' followed by the command 'sudo apt update && sudo apt upgrade' and a cursor at the end of the line.

```
ini112@servidor-principal:~$ sudo apt update && sudo apt upgrade
```

# Actualizar Ubuntu Server

## Paso 2 Reinicio

- Reiniciar dispositivo:



```
ini112@servidor-principal: ~  
ini112@servidor-principal:~$ reboot
```

A terminal window with a dark background. The title bar shows 'ini112@servidor-principal: ~' and standard window controls. The prompt is 'ini112@servidor-principal:~\$' and the command 'reboot' is entered.

# Instalar Apache2

## Paso 1 Instalar

- Instalar apache2 desde la libreria de ubuntu con el comando “apt install”

```
ini112@servidor-principal: ~  
ini112@servidor-principal:~$ sudo apt install apache2
```

## Paso 2 Verificar Estado

- Comprovar el estado del servicio de apache2 (nos deberia de aparecer ● un delante de apache2.service indicando que se encuentra activo en este momento.

```
ini112@servidor-principal:~$ sudo 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 2024-07-19 17:51:43 CEST; 32min ago  
     Docs: https://httpd.apache.org/docs/2.4/  
   Main PID: 7764 (apache2)  
     Tasks: 56 (limit: 19027)  
    Memory: 6.3M (peak: 7.2M)  
       CPU: 145ms  
    CGroup: /system.slice/apache2.service  
            └─7764 /usr/sbin/apache2 -k start  
              └─7766 /usr/sbin/apache2 -k start  
                └─7767 /usr/sbin/apache2 -k start  
                  └─7768 /usr/sbin/apache2 -k start  
  
jul 19 17:51:43 servidor-principal systemd[1]: Starting apache2.service - The Apache HTTP Server  
jul 19 17:51:43 servidor-principal apache2[7763]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1  
jul 19 17:51:43 servidor-principal systemd[1]: Started apache2.service - The Apache HTTP Server  
lines 1-17/17 (END)
```

# Instalar Apache2

## Paso 3 Verificar Pagina Por Defecto

- Prueba de funcionamiento de pagina WEB

🛡️ 192.168.1.37



## 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.

# Hostear nuestra pagina WEB

## Paso 1 Crear Directorio

- Crearemos el directorio de la nuestra pagina y nos dirigiremos a la carpeta

```
ini112@servidor-principal: ~  
ini112@servidor-principal:~$ sudo mkdir /var/www/prueba  
ini112@servidor-principal:~$ cd /var/www/prueba/  
ini112@servidor-principal:/var/www/prueba$
```



# Hostear nuestra pagina WEB

## Paso 2 Crear Pagina

- Crearemos la pagina index.html

```
ini112@servidor-principal: /var/www/prueba
ini112@servidor-principal:/var/www/prueba$ sudo nano index.html
```

```
GNU nano 7.2 index.html
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Prueba</title>
</head>
<body>
  <H1>Esto es una<br/>prueba</H1>
</body>
</html>
```

[ Wrote 11 lines ]

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^N Replace	^U Paste	^J Justify	^_ Go To Line



# Hostear nuestra pagina WEB

## Paso 3 Configurar Virtual Host

- Nos dirigiremos al directorio de configuración
- Copiaremos el archivo de configuración



```
ini112@servidor-principal: /etc/apache2/sites-available
ini112@servidor-principal:~$ cd /etc/apache2/sites-available/
ini112@servidor-principal:/etc/apache2/sites-available$
```



000-default.conf



prueba.conf

```
ini112@servidor-principal: /etc/apache2/sites-available
ini112@servidor-principal:/etc/apache2/sites-available$ cp 000-default.conf prueba.conf
```

# Hostear nuestra pagina WEB

## Paso 3 Configurar Virtual Host

c. Abriremos el documento



prueba.conf

```
ini112@servidor-principal: /etc/apache2/sites-available
ini112@servidor-principal: /etc/apache2/sites-available$ sudo nano prueba.conf
```

```
GNU nano 7.2 prueba.conf *
<VirtualHost *:80>
# 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.
#ServerName www.example.com

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}/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
</VirtualHost>

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line
```

# Hostear nuestra pagina WEB

## Paso 3 Configurar Virtual Host

c,e,f. Modificaremos ServerAdmin, DocumentRoot y añadiremos el apartado de ServerName



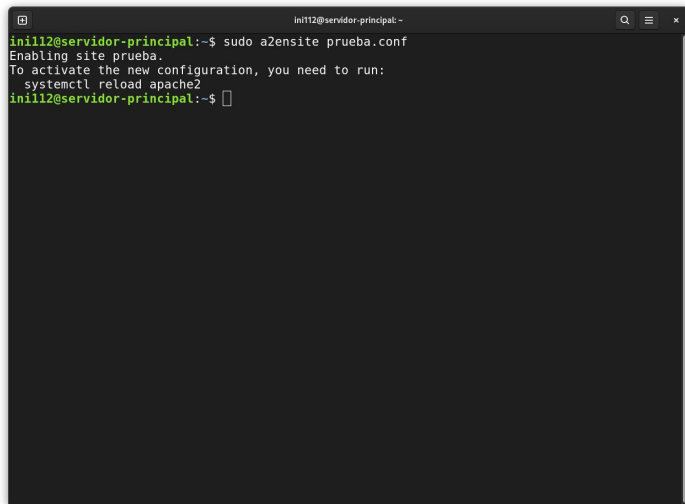
```
ini112@servidor-principal: /etc/apache2/sites-available
GNU nano 7.2 prueba.conf
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname and port that
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual 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.
    #ServerName www.example.com

    ServerName www.ejemplo.com
    ServerAdmin ini2552@gmail.com
    DocumentRoot /var/www/prueba
```

# Hostear nuestra pagina WEB

## Paso 4 Activar Host

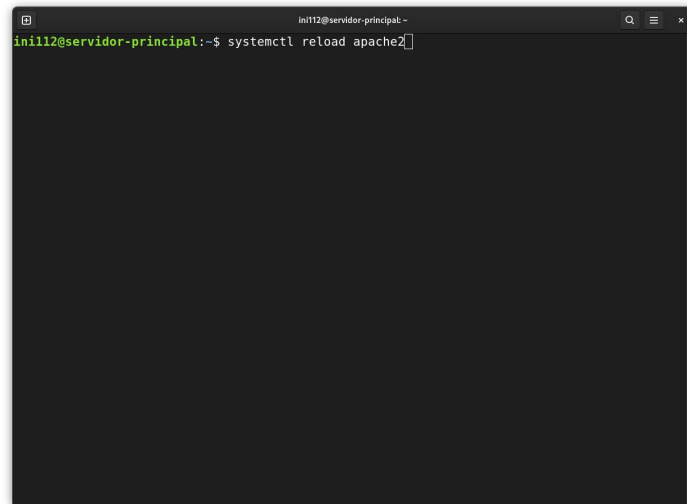
- Debemos activar el archivo de configuración



```
ini112@servidor-principal:~$ sudo a2ensite prueba.conf
Enabling site prueba.
To activate the new configuration, you need to run:
    systemctl reload apache2
ini112@servidor-principal:~$
```

## Paso 5 Reiniciar Apache

- Debemos reiniciar Apache2



```
ini112@servidor-principal:~$ systemctl reload apache2
```

# Instalar y Gestionar Modulos

## Paso 1 Instalar Modulos

- Instalaremos el modulo de Python WSGI

```
ini112@servidor-principal:~$ sudo apt install libapache2-mod-wsgi-py3
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes NUEVOS:
  libapache2-mod-wsgi-py3
0 actualizados, 1 nuevos se instalarán, 0 para eliminar y 4 no actualizados.
Se necesita descargar 103 kB de archivos.
Se utilizarán 300 kB de espacio de disco adicional después de esta operación.
Des:1 http://es.archive.ubuntu.com/ubuntu noble/main amd64 libapache2-mod-wsgi-py3 amd64 5.0.0-1build2 [103 kB]
Descargados 103 kB en 1s (145 kB/s)
Seleccionando el paquete libapache2-mod-wsgi-py3 previamente no seleccionado.
(Leyendo la base de datos ... 193932 ficheros o directorios instalados actualmente.)
Preparando para desempaquetar .../libapache2-mod-wsgi-py3_5.0.0-1build2_amd64.deb ...
Desempaquetando libapache2-mod-wsgi-py3 (5.0.0-1build2) ...
Configurando libapache2-mod-wsgi-py3 (5.0.0-1build2) ...
apache2 invoke: Enable module wsgi
Scanning processes...
Scanning candidates...
Scanning processor microcode...
Scanning linux images...

Running kernel seems to be up-to-date.

The processor microcode seems to be up-to-date.

Restarting services...

Service restarts being deferred:
systemctl restart NetworkManager.service
/etc/needrestart/restart.d/dbus.service
systemctl restart gdm.service
```

# Instalar y Gestionar Modulos

## Paso 2 Desactivar

- Para desactivar un modulo

```
ini112@servidor-principal:~$ sudo a2dismod wsgi
Module wsgi disabled.
To activate the new configuration, you need to run:
    systemctl restart apache2
ini112@servidor-principal:~$ systemctl restart apache2
ini112@servidor-principal:~$
```

## Paso 3 Activar

- Para activar un modulo

```
ini112@servidor-principal:~$ sudo a2enmod wsgi
Enabling module wsgi.
To activate the new configuration, you need to run:
    systemctl restart apache2
ini112@servidor-principal:~$ systemctl restart apache2
ini112@servidor-principal:~$
```