

# INFORME DE LA PRÁCTICA

## Instalación y Configuración de NGINX



NGINX  
Open Source

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**Módulo:** Despliegue de Aplicaciones Web

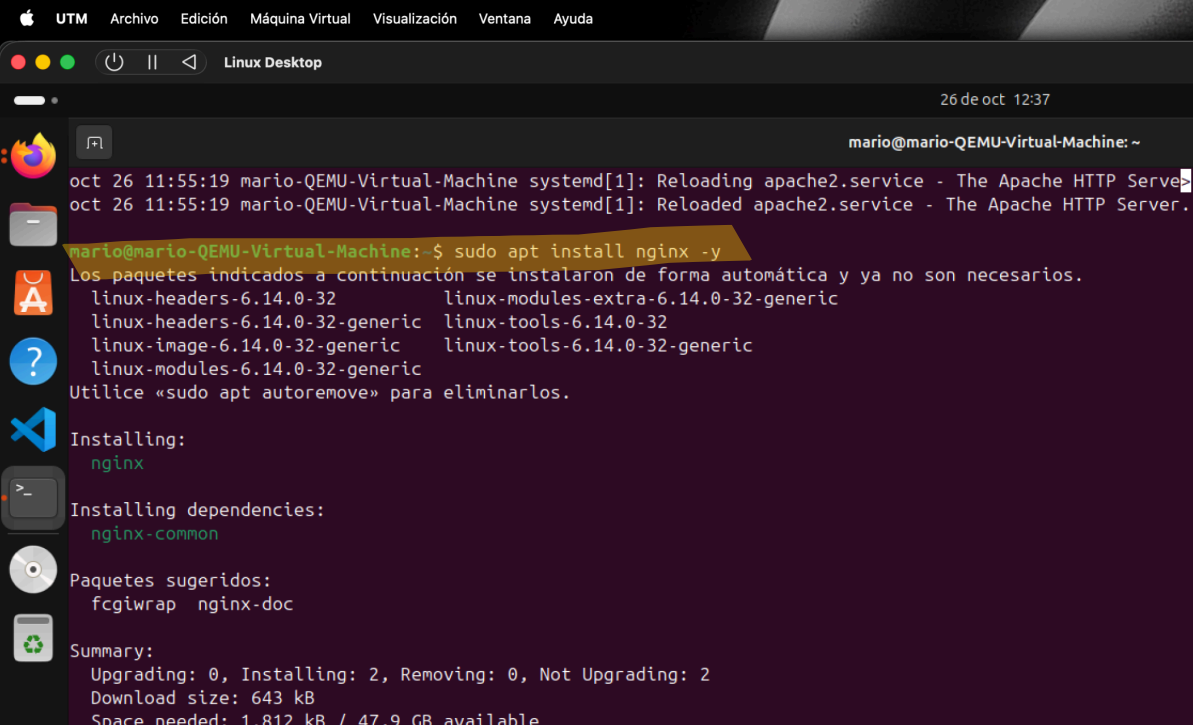
**Práctica:** Instalación de Nginx y coexistencia con Apache2

**Fecha:** Octubre 2025

# Pasos realizados

## 1. Actualización del sistema e instalación de Nginx

```
sudo apt update && sudo apt upgrade -y  
sudo apt install nginx -y
```

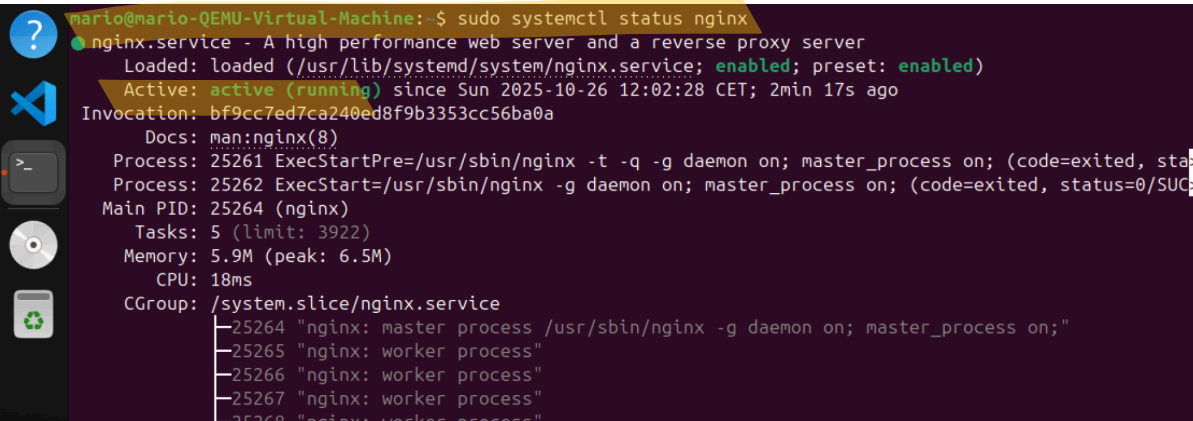


The screenshot shows a terminal window titled "Linux Desktop" with a menu bar (UTM, Archivo, Edición, Máquina Virtual, Visualización, Ventana, Ayuda) and a status bar (26 de oct 12:37). The terminal output shows the command `sudo apt install nginx -y` being executed. The output indicates that several packages were installed automatically because they were no longer needed. The packages listed are: `linux-headers-6.14.0-32`, `linux-modules-extra-6.14.0-32-generic`, `linux-headers-6.14.0-32-generic`, `linux-tools-6.14.0-32`, `linux-image-6.14.0-32-generic`, and `linux-tools-6.14.0-32-generic`. The terminal also shows the installation of `nginx` and its dependencies, including `nginx-common`. The summary shows that 2 packages were installed, with a download size of 643 kB and a space needed of 1.812 kB. The terminal also shows the command `sudo apt autoremove` being used to remove the unnecessary packages.

```
mario@mario-QEMU-Virtual-Machine: ~  
oct 26 11:55:19 mario-QEMU-Virtual-Machine systemd[1]: Reloading apache2.service - The Apache HTTP Server  
oct 26 11:55:19 mario-QEMU-Virtual-Machine systemd[1]: Reloaded apache2.service - The Apache HTTP Server.  
mario@mario-QEMU-Virtual-Machine:~$ sudo apt install nginx -y  
Los paquetes indicados a continuación se instalaron de forma automática y ya no son necesarios.  
linux-headers-6.14.0-32          linux-modules-extra-6.14.0-32-generic  
linux-headers-6.14.0-32-generic linux-tools-6.14.0-32  
linux-image-6.14.0-32-generic   linux-tools-6.14.0-32-generic  
linux-modules-6.14.0-32-generic  
Utilice «sudo apt autoremove» para eliminarlos.  
  
Installing:  
nginx  
  
Installing dependencies:  
nginx-common  
  
Paquetes sugeridos:  
fcgiwrap nginx-doc  
  
Summary:  
Upgrading: 0, Installing: 2, Removing: 0, Not Upgrading: 2  
Download size: 643 kB  
Space needed: 1.812 kB / 47,9 GB available
```

Comprobé su estado (`sudo systemctl status nginx`)

**Resultado:** servicio activo (active (running))



The screenshot shows a terminal window titled "Linux Desktop" with a menu bar (UTM, Archivo, Edición, Máquina Virtual, Visualización, Ventana, Ayuda) and a status bar (26 de oct 12:37). The terminal output shows the command `sudo systemctl status nginx` being executed. The output shows that the `nginx.service` is loaded and enabled. It is active (running) since Sun 2025-10-26 12:02:28 CET, 2min 17s ago. The invocation is `bf9cc7ed7ca240ed8f9b3353cc56ba0a`. The docs are `man:nginx(8)`. The process is `25261 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, sta`. The process is `25262 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUC`. The main PID is `25264 (nginx)`. The tasks are `5 (limit: 3922)`. The memory is `5.9M (peak: 6.5M)`. The CPU is `18ms`. The CGroup is `/system.slice/nginx.service`. The terminal also shows the command `sudo systemctl status nginx` being used to check the status of the service.

```
mario@mario-QEMU-Virtual-Machine:~$ 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: enabled)  
   Active: active (running) since Sun 2025-10-26 12:02:28 CET; 2min 17s ago  
 Invocation: bf9cc7ed7ca240ed8f9b3353cc56ba0a  
    Docs: man:nginx(8)  
  Process: 25261 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, sta  
  Process: 25262 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUC  
 Main PID: 25264 (nginx)  
    Tasks: 5 (limit: 3922)  
  Memory: 5.9M (peak: 6.5M)  
     CPU: 18ms  
   CGroup: /system.slice/nginx.service  
           └─25264 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"  
             └─25265 "nginx: worker process"  
               └─25266 "nginx: worker process"  
                 └─25267 "nginx: worker process"  
                   └─25268 "nginx: worker process"
```

## 2. Verificación de coexistencia con Apache

Antes de tocar nada, confirmé qué servicio escuchaba en qué puerto:

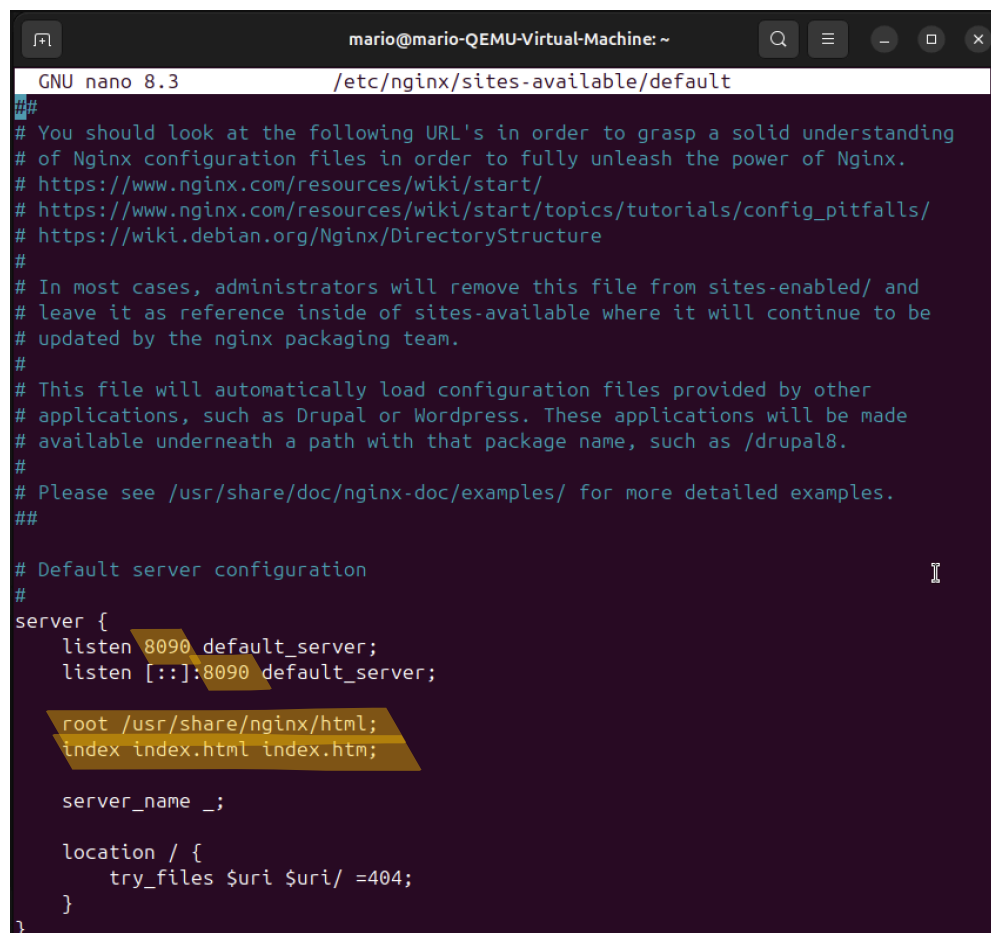
```
sudo ss -tlnp | egrep ':80\b|:8090\b'
```

**Resultado:** Apache escuchando en el puerto **80**, y Nginx en el **8090**.

```
mario@mario-QEMU-Virtual-Machine:~$ sudo ss -tlnp | egrep ':80\b|:8090\b'
[sudo] contraseña para mario:
LISTEN 0      511          0.0.0.0:8090      0.0.0.0:*        users:((("nginx",pid=27376),("nginx",pid=27375),("nginx",pid=25264),("nginx",pid=27376),("nginx",pid=27375),("nginx",pid=25264)))
LISTEN 0      511          [::]:8090        [::]:*           users:((("nginx",pid=27376),("nginx",pid=27375),("nginx",pid=25264),("nginx",pid=27376),("nginx",pid=27375),("nginx",pid=25264)))
LISTEN 0      511          *:80             *:~              users:((("apache2",pid=1166),("apache2",pid=1166)))
mario@mario-QEMU-Virtual-Machine:~$
```

## 3. Configuración de Nginx en el puerto 8090

Edité el fichero `/etc/nginx/sites-available/default` y dejé la siguiente configuración:



```
mario@mario-QEMU-Virtual-Machine: ~
GNU nano 8.3 /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 8090 default_server;
    listen [::]:8090 default_server;

    root /usr/share/nginx/html;
    index index.html index.htm;

    server_name _;

    location / {
        try_files $uri $uri/ =404;
    }
}
```

## 4. Verificación de funcionamiento

Comprué que servidor responde en cada puerto:

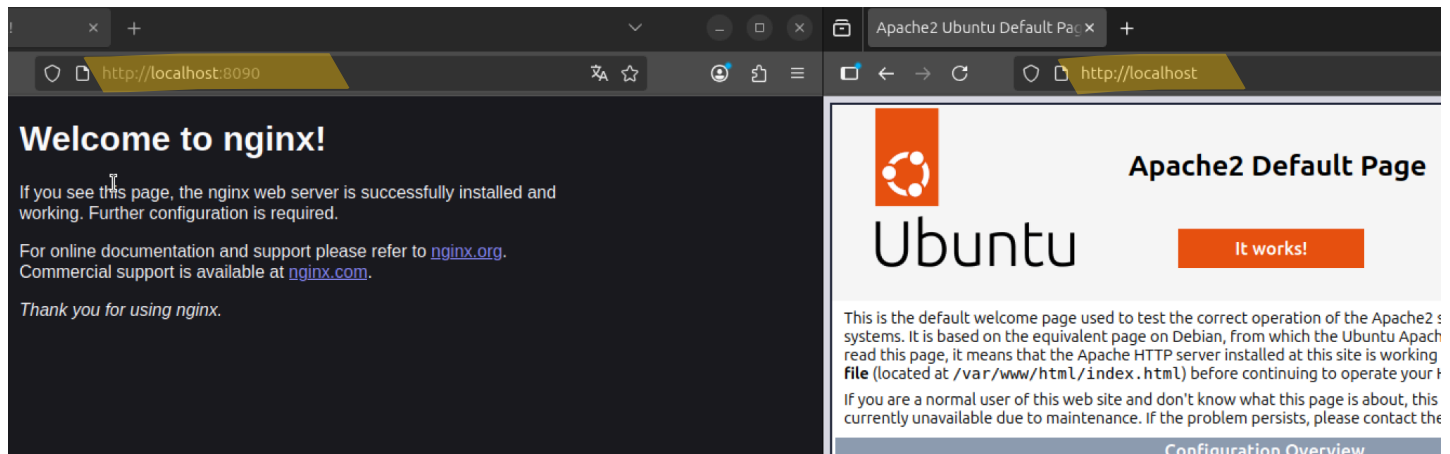
```
curl -I http://localhost:80 | grep Server
curl -I http://localhost:8090 | grep Server
```

- **Puerto 80** → Server: Apache/2.4.58 (Ubuntu)
- **Puerto 8090** → Server: nginx/1.18.0 (Ubuntu)

```
mario@mario-QEMU-Virtual-Machine:~$ curl -I http://localhost:80 | grep Server
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           % Dload    % Upload   Dload  Upload  Total  Spent  Left  Speed
0 10672    0     0     0     0      0     0  --:--:-- --:--:-- --:--:--     0
Server: Apache/2.4.63 (Ubuntu)
mario@mario-QEMU-Virtual-Machine:~$ curl -I http://localhost:8090 | grep Server
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           % Dload    % Upload   Dload  Upload  Total  Spent  Left  Speed
0 615    0     0     0     0      0     0  --:--:-- --:--:-- --:--:--     0
Server: nginx/1.26.3 (Ubuntu)
```

Verifiqué también que ambos servicios se veían correctamente en el navegador:

```
http://localhost:8090/
http://localhost:80
```



## Conclusiones

- Se logró instalar **NGINX** y hacerlo funcionar en paralelo con **Apache2** sin conflicto de puertos.
- Cada servidor atiende peticiones de forma independiente:
  - Apache en el puerto **80**, sirviendo /var/www/html.
  - Nginx en el puerto **8090**, sirviendo /var/www/nginx.
- Se comprobó que ambos servicios están activos y accesibles mediante curl y el navegador.
- Nginx no interfiere con Apache, cumpliendo el objetivo de la práctica.