

# Instalar Nginx, MySQL y PHP juntos

The screenshot shows a terminal window titled "Ubuntu\_24.04\_LEMP\_VIRTUALHOST [Corriendo] - Oracle VirtualBox". The terminal session starts with the command "sudo apt update" followed by the installation of Nginx, MySQL-server, and PHP-fpm with MySQL support using "sudo apt install nginx mysql-server php-fpm php-mysql -y". It then checks the status of Nginx with "sudo systemctl status nginx", logs in as root with "sudo mysql -u root -p", exits MySQL with "exit;", runs "php -v", and enters a password for the user "examen". The terminal then lists several software packages being downloaded from the Ubuntu repositories, including noble-security, jammy, jammy-updates, jammy-security, and noble-security/main packages for i386 and amd64 architectures. The session ends with the command "mysql> EXIT;". A file named "php\_mysql" is visible in the background.

```
examen@UBUNTU-24-04:~$ sudo apt update
sudo apt install nginx mysql-server php-fpm php-mysql -y
sudo systemctl status nginx
sudo mysql -u root -p
exit;
php -v
[sudo] contraseña para examen:
Des:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Obj:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Des:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Des:4 http://archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Des:5 http://security.ubuntu.com/ubuntu noble-security/main i386 Packages [354 kB]
Des:6 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Des:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1.309 kB]
Des:8 http://archive.ubuntu.com/ubuntu noble InRelease
Des:9 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Des:10 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [215 kB]
Des:11 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21,5 kB]
Des:12 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [9.416 B]
```

```
mysql> CREATE USER 'phpuser'@'localhost' IDENTIFIED BY 'contraseña123';
Query OK, 0 rows affected (4,71 sec)

mysql> GRANT ALL PRIVILEGES ON *.* TO 'phpuser'@'localhost';
Query OK, 0 rows affected (0,35 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0,23 sec)

mysql> EXIT;
Bye
examen@UBUNTU-24-04:~$ sudo nano /var/www/html/testdb.php
examen@UBUNTU-24-04:~$ soy daniel
```

# Configurar Nginx para PHP y recargar

```
GNU nano 7.2          /etc/nginx/sites-available/default *
server {
    listen 80 default_server;
    listen [::]:80 default_server;

    root /var/www/html;
    index index.php index.html index.htm;
    server_name _;

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

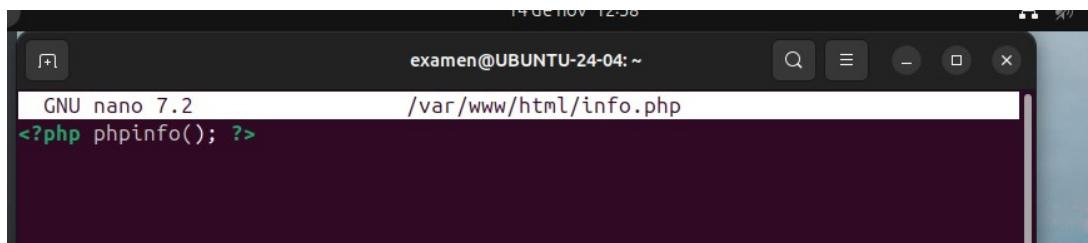
    location ~ \.php$ {
        include snippets/fastcgi-php.conf;
        fastcgi_pass unix:/var/run/php/php8.3-fpm.sock;
    }

    location ~ /\.ht {
        deny all;
    }
}

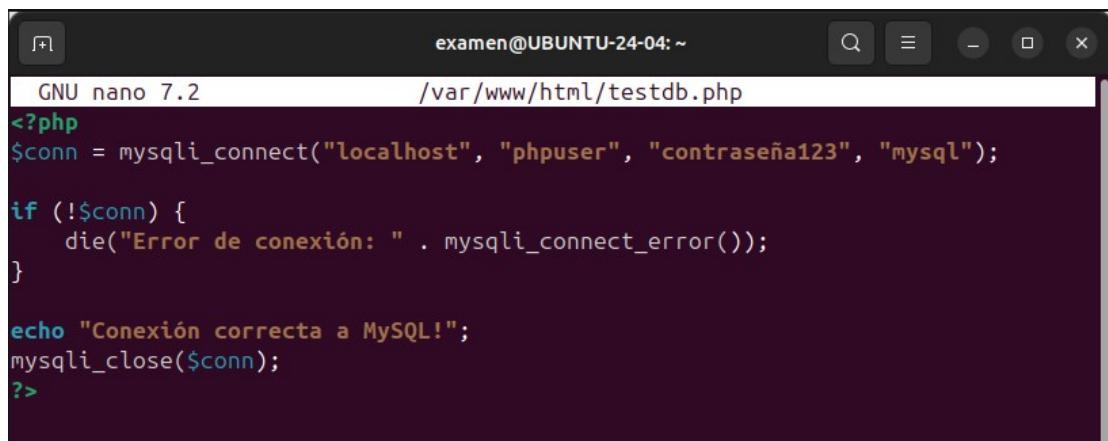
^G Ayuda      ^O Guardar      ^W Buscar      ^K Cortar      ^T Ejecutar      ^C Ubicación
^X Salir      ^R Leer fich.  ^\ Reemplazar ^U Pegar       ^J Justificar ^/ Ir a línea
```

```
examen@UBUNTU-24-04:~$ sudo nginx -t
sudo systemctl reload nginx
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
examen@UBUNTU-24-04:~$ soy daniel
```

# Crear archivos de prueba (PHP y MySQL) y probar



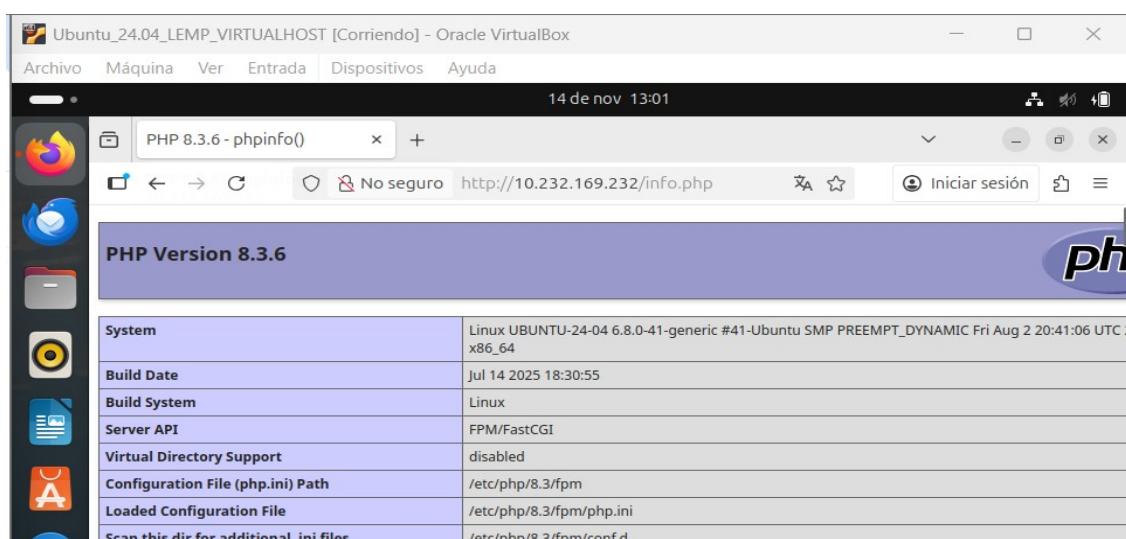
```
examen@UBUNTU-24-04: ~
GNU nano 7.2          /var/www/html/info.php
<?php phpinfo(); ?>
```



```
examen@UBUNTU-24-04: ~
GNU nano 7.2          /var/www/html/testdb.php
<?php
$conn = mysqli_connect("localhost", "phpuser", "contraseña123", "mysql");

if (!$conn) {
    die("Error de conexión: " . mysqli_connect_error());
}

echo "Conexión correcta a MySQL!";
mysqli_close($conn);
?>
```



Ubuntu\_24.04\_LEMP\_VIRTUALHOST [Corriendo] - Oracle VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

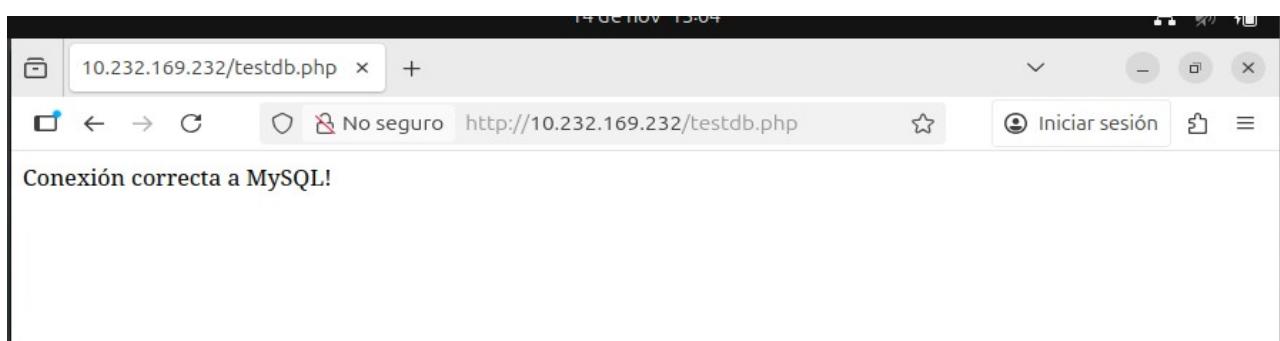
14 de nov 13:01

PHP 8.3.6 - phpinfo()

No seguro http://10.232.169.232/info.php

PHP Version 8.3.6

| System                                  | Linux UBUNTU-24-04 6.8.0-41-generic #41-Ubuntu SMP PREEMPT_DYNAMIC Fri Aug 2 20:41:06 UTC 2025 x86_64 |
|---|---|
| Build Date                              | Jul 14 2025 18:30:55  |
| Build System                            | Linux   |
| Server API                              | FPM/FastCGI   |
| Virtual Directory Support               | disabled  |
| Configuration File (php.ini) Path       | /etc/php/8.3/fpm  |
| Loaded Configuration File               | /etc/php/8.3/fpm/php.ini  |
| Scan this dir for additional .ini files | /etc/php/8.3/fpm/conf.d   |



10.232.169.232/testdb.php

No seguro http://10.232.169.232/testdb.php

Conexión correcta a MySQL!

# VIRTUALHOST EN NGINX

## Crear directorio y archivo de prueba

```
examen@UBUNTU-24-04:~$ sudo mkdir -p /var/www/prueba2
sudo nano /var/www/prueba2/test.php
examen@UBUNTU-24-04:~$
```

```
GNU nano 7.2                               /var/www/prueba2/test.php
<?php
echo "<h2>Prueba avanzada de ejecución PHP-FPM</h2>";

$php_version = phpversion();
echo "<p>Versión de PHP: <strong>$php_version</strong></p>";

if (function_exists('mysqli_connect')) {
    echo "<p>Extensión MySQLi: disponible ✓</p>";
} else {
    echo "<p>Extensión MySQLi: no disponible X</p>";
}

echo "<p>Usuario actual del proceso PHP: <strong>" . get_current_user() . "</strong>";

echo "<hr><h3>Variables del entorno:</h3>";
foreach ($_SERVER as $key => $value) {
    echo "<strong>$key</strong>: $value<br>";
}
?>

[ 19 líneas leídas ]
^G Ayuda      ^O Guardar     ^W Buscar     ^K Cortar     ^T Ejecutar   ^C Ubicación
^X Salir      ^R Leer fich.  ^\ Reemplazar ^U Pegar      ^J Justificar^/ Ir a línea
```

```
examen@UBUNTU-24-04:~$ sudo chown -R www-data:www-data /var/www/prueba2
examen@UBUNTU-24-04:~$
```

# Crear archivo de configuración del VirtualHost

The screenshot shows a terminal window titled "examen@UBUNTU-24-04: ~". The command "sudo nano /etc/nginx/sites-available/prueba2.conf" was run to edit the configuration file. The file contains the following Nginx configuration:

```
GNU nano 7.2          /etc/nginx/sites-available/prueba2.conf *
server {
    listen 80;
    server_name prueba2.local;

    root /var/www/prueba2;
    index index.php index.html;

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

    location ~ \.php$ {
        include snippets/fastcgi-php.conf;
        fastcgi_pass unix:/var/run/php/php8.3-fpm.sock;
    }

    location ~ /\.ht {
        deny all;
    }
}
```

At the bottom of the terminal window, there is a menu bar with keyboard shortcuts for various actions like Ayuda (Help), Guardar (Save), Buscar (Search), Cortar (Cut), Ejecutar (Execute), etc.

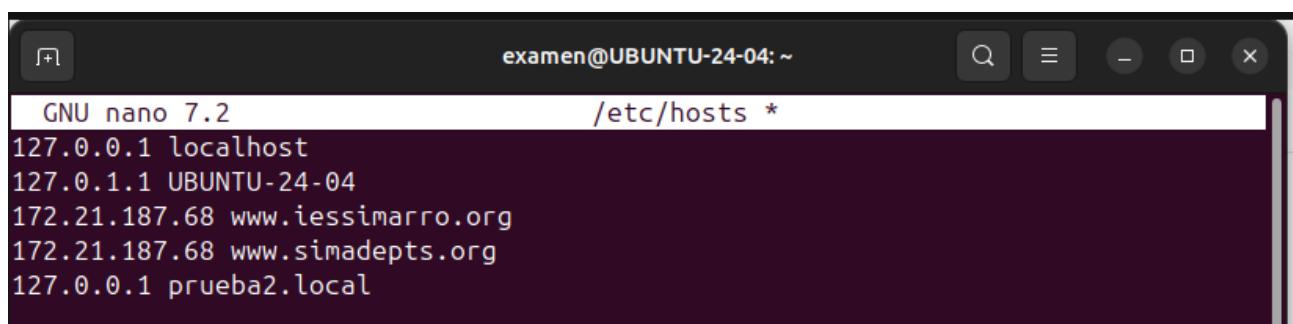
The screenshot shows a terminal window titled "examen@UBUNTU-24-04: ~". The command "sudo nano /etc/nginx/sites-available/prueba2.conf" was run to edit the configuration file. After saving, the user executed the command "soy daniel" to test the configuration. The output shows the command was successful.

```
examen@UBUNTU-24-04:~$ sudo nano /etc/nginx/sites-available/prueba2.conf
examen@UBUNTU-24-04:~$ soy daniel
```

# Habilitar el VirtualHost y recargar Nginx

```
examen@UBUNTU-24-04:~$ sudo ln -s /etc/nginx/sites-available/prueba2.conf /etc/nginx/sites-enabled/
sudo nginx -t
sudo systemctl reload nginx
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
examen@UBUNTU-24-04:~$ sudo nano /etc/hosts
examen@UBUNTU-24-04:~$ sudo nano /etc/hosts
examen@UBUNTU-24-04:~$ soy daniel
```

## Configurar /etc/hosts para probar localmente



```
GNU nano 7.2          /etc/hosts *
127.0.0.1 localhost
127.0.1.1 UBUNTU-24-04
172.21.187.68 www.ilessimarro.org
172.21.187.68 www.simadepts.org
127.0.0.1 prueba2.local
```

