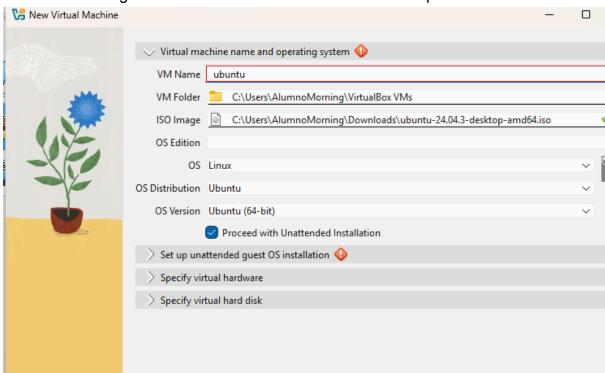
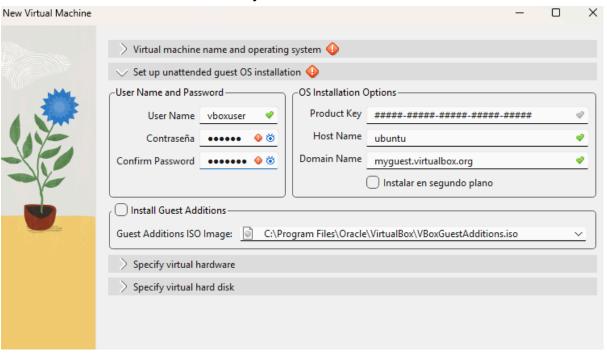
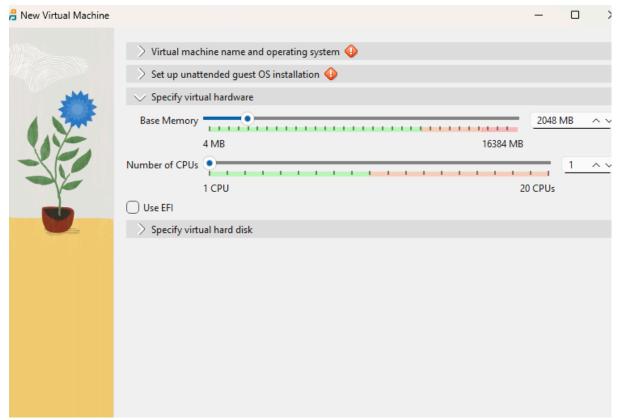
## 1. Añadimos la imagen iso e introducimos el nombre de la máquina virtual



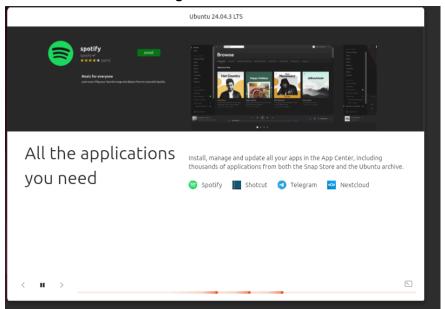
## 2. Introduces el nombre de usuario y la contraseña



# 3. Configuras los recursos que tendrá la máquina virtual, tales como la cantidad de memoria, núcleos etc...



## 4. Procedemos con la segunda instalación del servidor



#### Introducimos este comando para instalar el servidor web Apache

```
vboxuser@ubuntu:~$ sudo su
[sudo] password for vboxuser:
root@ubuntu:/home/vboxuser# sudo apt install apache2 -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:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libaprutil1t64
Suggested packages:
 apache2-doc apache2-suexec-pristine | apache2-suexec-custom
The following NEW packages will be installed:
 apache2 apache2-bin apache2-data apache2-utils libapr1t64
 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64
0 upgraded, 8 newly installed, 0 to remove and 13 not upgraded.
Need to get 1,902 kB of archives.
After this operation, 7,451 kB of additional disk space will be used.
Get:1 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapr1t64 am
d64 1.7.2-3.1ubuntu0.1 [108 kB]
Get:2 http://es.archive.ubuntu.com/ubuntu.poble/main.amd64 libaprutil1t64
```

## 6.

Instalamos php y sus módulos para Apache

```
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
root@ubuntu:/home/vboxuser# sudo apt install php libapache2-mod-php -y
waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
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Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
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ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
ld by process 4235 (aptd)
Waiting for cache lock: Could not get lock /var/lib/dpkg/lock-frontend. It is he
```

### Iniciamos servidor de Apache

root@ubuntu:/home/vboxuser# sudo service apache2 start

## 8.

#### Verificar estado de Apache

### Creamos un archivo que muestre información php

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

## 10.

#### Probamos el archivo con este comando

```
root@ubuntu:/home/vboxuser# curl http://localhost/info.php
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"><head>
<tstyle 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;}
a:hover {text-decoration: underline;}
table {border-collapse: collapse; border: 0; width: 934px; box-shadow: 1px 2px 3px rgba(0, 0, 0, 0.2);}
```

#### Y nos aparecerá la URL de la página web

PHP Version 8.3.6	php
System	Linux ubuntu 6.14.0-32-generic #32~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Tue Sep 2 14:21:04 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-ctippe.ini, /etc/php/8.3/apache2/conf.d/20-exif.ini, / etc/php/8.3/apache2/conf.d/20-fileinfo.ini, /etc/php/8.3/apache2/conf.d/20-fileinfo.ini, /etc/php/8.3/apache2/conf.d/20-fileinfo.ini, /etc/php/8.3/apache2/conf.d/20-fileinfo.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-onf.d/20-shmop.ini, /etc/php/8.3/apache2/conf.d/20-sockets.ini, /etc/php/8.3/apache2/conf.d/20-sysvmsg.ini, /etc/php/8.3/apache2/conf.d/20-sysvsem.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

## **COMANDOS NGINX +HTML**

## 11.

#### Instalamos servidor NGINX

```
root@ubuntu:/home/vboxuser# sudo apt install nginx -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
libllvm19 linux-headers-6.14.0-29-generic linux-hwe-6.14-headers-6.14.0-29 linux-hwe-6.14-tools-6.14.0-29
linux-image-6.14.0-29-generic linux-modules-6.14.0-29-generic linux-modules-extra-6.14.0-29-generic
```

## 12.

#### Iniciamos el servidor

```
root@ubuntu:/home/vboxuser# systemctl status nginx.service

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 2025-10-03 07:57:11 UTC; 10s ago

Docs: man:nginx(8)

Process: 18398 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_process on; (code=exited, status=0/SUP-process: 18400 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (code=exited, status=0/SUCCESS)

Main PID: 18401 (nginx)

Tasks: 4 (limit: 4604)

Memory: 2.7M (peak: 2.9M)

CPU: 13ms

CGroup: /system.slice/nginx.service

-18401 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"

-18402 "nginx: worker process"

-18403 "nginx: worker process"

Oct 03 07:57:11 ubuntu systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy serout of 19/19 (FND)
```

## 13.

## Creamos página html simple

root@ubuntu:/home/vboxuser# echo ="<h1>Hola Mundo desde Nginxz</h1>Servidor funcionando correctamente" | sudo tee /var/www/html/index.html =<h1>Hola Mundo desde Nginxz</h1>Servidor funcionando correctamente

Probamos que la página funciona correctamente

## root@ubuntu:/home/vboxuser# curl http://localhost



## 15.

Mostramos Ip para acceso a Windows

root@ubuntu:/home/vboxuser# ip addr show enp0s3 | grep inet
inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3