

Apache2 en Devian


La instalación de Apache2 comienza con la maquina virtual encendida siendo root (implementeando «su» en la terminal) y se instala mediante este comando:

```
root@debian:/home/daw# apt install apache2
```

Y ahora comprueba si apartir de la ip de la maquina aparezca la pagina predeterminada de apache2

```
debserver_Apache2 [S'està executant] - Oracle VM VirtualBox
Fitxer  Màquina  Visualitza  Entrada  Dispositius  Ajuda
daw@debian:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group d
    link/ether 08:00:27:97:cb:2e brd ff:ff:ff:ff:ff:ff
    inet 192.168.85.86/24 scope global dynamic enp0s3
        valid_lft 86359sec preferred_lft 86359sec
    inet6 fe80::a00:27ff:fe37:cb2e/64 scope link
        valid_lft forever preferred_lft forever
```

192.168.85.86



Apache2 Debian Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Debian systems. If you can read this page, it means that the Apache HTTP server at this site is working properly. You should **replace this file** (located at `/var/www/html/index`) 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 that the site is currently unavailable due to maintenance. If the problem persists, please contacta site's administrator.

Configuration Overview

Debian's Apache2 default configuration is different from the upstream default configuration, a into several files optimized for interaction with Debian 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 **manu** apache2-doc package was installed on this server.

The configuration layout for an Apache2 web server installation on Debian systems is as follow

debserver_Apache2 [S'està execu

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Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-us
apache2.service.
Created symlink /etc/systemd/system/multi-us
md/system/apache-htcacheclean.service.
Procesando disparadores para man-db (2.9.4-2
Procesando disparadores para libc-bin (2.31-
root@debian:/home/daw# systemctl status apac
apache2.service - The Apache HTTP Server
Loaded: loaded (/lib/systemd/system/apa
Active: active (running) since Mon 2021
Docs: https://httpd.apache.org/docs/2
Main PID: 1149 (apache2)
Tasks: 55 (limit: 4495)

Ahora tendremos que instalar MariaDB para implementar PHP en la pagina:

```
root@debian:/home/daw# apt install -y mariadb-server mariadb-client
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes adicionales:
  galera-4 gawk libaio1 libcgi-fast-perl libcgi-pm-perl libclone-perl
```

Ahora comprueba que mariadb funcione correctamente:

```
root@debian:/home/daw# systemctl status mariadb
● mariadb.service - MariaDB 10.5.12 database server
   Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor prese
   Active: active (running) since Tue 2021-10-26 10:00:49 CEST; 38s ago
     Docs: man:mariadb(8)
           https://mariadb.com/kb/en/library/systemd/
```

Y ejecutamos mariaDB para la instalación y decimos todo que no:

```
root@debian:/home/daw# mysql_secure_installation
```

```
Switch to unix_socket authentication [Y/n] n
```

```
Change the root password? [Y/n] n
```

```
Remove anonymous users? [Y/n] n
```

```
Disallow root login remotely? [Y/n] n
```

```
Remove test database and access to it? [Y/n] n
```

```
Reload privilege tables now? [Y/n] n
```

```
All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.
```

```
Thanks for using MariaDB!
```

```
root@debian:/home/daw#
```


Y instalamos los paquetes de php

```
root@debian:/home/daw# apt install -y php php-mysql libapache2-mod-php
```

Y también mas paquetes de apache2:

```
root@debian:/home/daw# apt install -y apache2 apache2-utils
```

Entonces implementando el comando en el navegador nos mostrara el php poniendo «ip/info.php»:
echo "<?php phpinfo(); ?>" | sudo tee /var/www/html/info.php

PHP Version 7.4.21	
	
System	Linux debian 5.10.0-9-amd64 #1 SMP Debian 5.10.70-1 (2021-09-30) x86_64
Build Date	Jul 2 2021 03:59:48
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.4/apache2
Loaded Configuration File	/etc/php/7.4/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.4/apache2/conf.d
Additional .ini files parsed	/etc/php/7.4/apache2/conf.d/10-mysqlnd.ini, /etc/php/7.4/apache2/conf.d/10-opcache.ini, /etc/php/7.4/apache2/conf.d/10-pdo.ini, /etc/php/7.4/apache2/conf.d/20-calendar.ini, /etc/php/7.4/apache2/conf.d/20-ctype.ini, /etc/php/7.4/apache2/conf.d/20-exif.ini, /etc/php/7.4/apache2/conf.d/20-ffi.ini, /etc/php/7.4/apache2/conf.d/20-fileinfo.ini, /etc/php/7.4/apache2/conf.d/20-ftp.ini, /etc/php/7.4/apache2/conf.d/20-gettext.ini, /etc/php/7.4/apache2/conf.d/20-iconv.ini, /etc/php/7.4/apache2/conf.d/20-json.ini, /etc/php/7.4/apache2/conf.d/20-mysqli.ini, /etc/php/7.4/apache2/conf.d/20-pdo_mysql.ini, /etc/php/7.4/apache2/conf.d/20-phar.ini, /etc/php/7.4/apache2/conf.d/20-posix.ini, /etc/php/7.4/apache2/conf.d/20-readline.ini, /etc/php/7.4/apache2/conf.d/20-shmop.ini, /etc/php/7.4/apache2/conf.d/20-sockets.ini, /etc/php/7.4/apache2/conf.d/20-sysmsg.ini, /etc/php/7.4/apache2/conf.d/20-syssem.ini, /etc/php/7.4/apache2/conf.d/20-sysvshm.ini, /etc/php/7.4/apache2/conf.d/20-tokenizer.ini
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902.NTS
PHP Extension Build	API20190902.NTS
Debug Build	no

Nginx en Devian:

En la maquina virtual instalamos el paquete nginx:

```
root@debian:/home/daw# apt-get install nginx
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
```

Tambien tendremos que isntalar el php y diversos paquetes

```
root@debian:/home/daw# apt-get install php-fpm
```

```
root@debian:/home/daw# apt-get install php-mysql php-mbstring php-xml php-gd php
-curl php-bcmath php-ldap mlocate
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
```

```
root@debian:/home/daw# updatedb
root@debian:/home/daw#
```

Y en estos archivos tendremos que poner estos textos:

```

GNU nano 5.4 /etc/nginx/nginx.conf
user www-data;
worker_processes auto;
pid /run/nginx.pid;
include /etc/nginx/modules-enabled/*.conf;
events {
    worker_connections 768;
}
http {
    client_max_body_size 32M;
    sendfile on;
    tcp_nopush on;
    tcp_nodelay on;
    keepalive_timeout 65;
    types_hash_max_size 2048;
    include /etc/nginx/mime.types;
    default_type application/octet-stream;
    ssl_protocols TLSv1 TLSv1.1 TLSv1.2 TLSv1.3;
    ssl_prefer_server_ciphers on;
    access_log /var/log/nginx/access.log;
    error_log /var/log/nginx/error.log;
    gzip on;
    include /etc/nginx/conf.d/*.conf;
    include /etc/nginx/sites-enabled/*;
}

```

```

GNU nano 5.4 /etc/nginx/sites-available/default
server_name _;

location / {
    # First attempt to serve request as file, then
    # as directory, then fall back to displaying
    # 404.
    try_files $uri $uri/ =404;
}

# pass PHP scripts to FastCGI server
#
location ~ .php$ {
    include snippets/fastcgi-php.conf;
    #
    # With php-fpm (or other unix sockets):
    fastcgi_pass unix:/run/php/php7.4-fpm.sock;
    # With php-cgi (or other tcp sockets):
    fastcgi_pass 127.0.0.1:9000;
}

```

```

GNU nano 5.4 /etc/apt/sources.list
# deb cdrom:[Debian GNU/Linux 11.0.0 _Bullseye_ - Official amd64 DVD Binary-1 20210816] bullseye main contrib non-free
deb cdrom:[Debian GNU/Linux 11.0.0 _Bullseye_ - Official amd64 DVD Binary-1 20210816] bullseye main contrib non-free

deb http://security.debian.org/debian-security bullseye-security main contrib
deb-src http://security.debian.org/debian-security bullseye-security main contrib

# bullseye-updates, to get updates before a point release is made;
# see https://www.debian.org/doc/manuals/debian-reference/ch02.en.html#updates_archive
# A network mirror was not selected during install. The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ bullseye-updates main contrib
# deb-src http://deb.debian.org/debian/ bullseye-updates main contrib
deb http://deb.debian.org/debian/ bullseye main
deb-src http://deb.debian.org/debian/ bullseye main

deb http://security.debian.org/debian-security bullseye-security main contrib
deb-src http://security.debian.org/debian-security bullseye-security main contrib

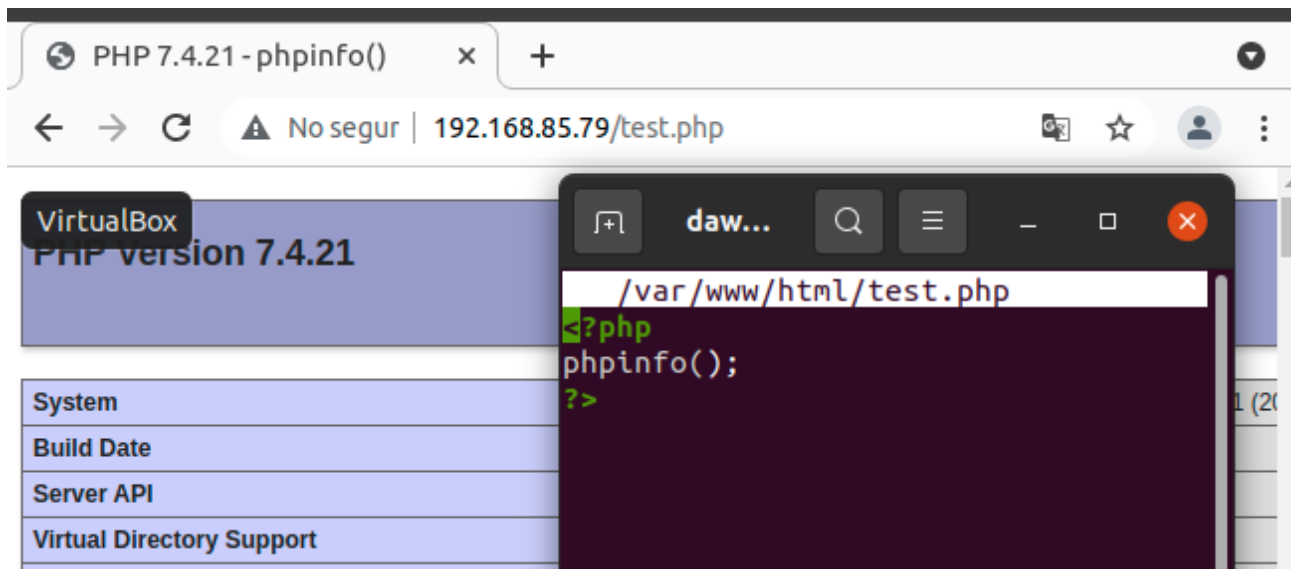
deb http://deb.debian.org/debian/ bullseye-updates main contrib
deb-src http://deb.debian.org/debian/ bullseye-updates main contrib
deb http://deb.debian.org/debian bullseye main contrib non-free
deb-src http://deb.debian.org/debian bullseye main contrib non-free

deb http://deb.debian.org/debian-security bullseye-updates main contrib non-free
deb-src http://deb.debian.org/debian-security bullseye-updates main contrib non-free

deb http://deb.debian.org/debian bullseye-updates main contrib non-free
deb-src http://deb.debian.org/debian bullseye-updates main contrib non-free
deb http://deb.debian.org/debian bullseye-backports main contrib non-free
deb-src http://deb.debian.org/debian bullseye-backports main contrib non-free

```

Y ahora solo comprobaremos que en el navegador funcione tambien creando el test.php:



```
debserver_ NGINX (ñe) [S'està executant] - Oracle VM VirtualBox
Fitxer Màquina Visualitza Entrada Dispositius Ajuda
root@debian:/home/daw# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group de
0000
    link/ether 08:00:27:00:00:00 fc:b7 brd ff:ff:ff:ff:ff:ff
    inet 192.168.85.79/24 brd 192.168.85.255 scope global dynamic enp0s3
        valid_lft 83127sec preferred_lft 83127sec
    inet6 fe80::a00:27ff:fe6d:fcb7/64 scope link
        valid_lft forever preferred_lft forever
root@debian:/home/daw#
```

Apache2 en CentOS

Con la maquina virtual actualizamos los paquetes:

```
[root@localhost daw12]# yum update -y
```

Y instalamos los paquetes y despues volvemos a actualizar:

```
[root@localhost daw12]# yum install -y https://rpms.remirepo.net/enterprise/remi-release-8.rpm
```

```
[root@localhost daw12]# yum update
```

```
Is this ok [y/N]: y
```

Ahora instalamos el php con la version que queremos:

```
[root@localhost daw12]# yum module disable -y composer glpi php
```

```
[root@localhost daw12]# yum module enable -y composer glpi php:remi-7.4
```

Y instalamos los paquetes extras del php

```
[root@localhost daw12]# yum install -y httpd php php-mysqlnd
```

```
[root@localhost daw12]# systemctl enable --now php-fpm httpd
Created symlink /etc/systemd/system/multi-user.target.wants/php-fpm.service → /usr/lib/systemd/system/php-fpm.service.
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@localhost daw12]#
```

Y instalamos el mySQL:

```
[root@localhost daw12]# yum install -y mysql-server
```

```
[root@localhost daw12]# systemctl enable --now mysqld
Created symlink /etc/systemd/system/multi-user.target.wants/mysqld.service → /usr/lib/systemd/system/mysqld.service.
```

Editamos el firewall para que no de problemas:

```
[root@localhost daw12]# firewall-cmd --permanent --add-service={http,https}
success
[root@localhost daw12]# firewall-cmd --permanent --add-service=http
Warning: ALREADY_ENABLED: http
success
[root@localhost daw12]# firewall-cmd --reload
success
[root@localhost daw12]#
```

Y ahora solamente lo comprobamos en el navegador:

PHP 7.4.25 - phpinfo()

← → ↻ No segur | 192.168.85.18/info.php

PHP Version 7.4.25

System	Linux localh
Build Date	Oct 19 2022
Build System	
Build Provider	
Server API	/var/www/html/info.php
Virtual Directory Support	
Configuration File (php.ini) Path	

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```
[root@localhost daw121]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKN
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_c
    link/ether 08:00:27:c7:84:7a brd ff:ff:ff:ff:ff:ff
    inet 192.168.85.18/24 brd 192.168.85.255 scope global dynami
        valid_lft 86254sec preferred_lft 86254sec
    inet6 fe80::27ff:fec7:847a/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
#
```

daw...

/var/www/html/info.php

```
?php phpinfo();
?>
```


Nginx en CentOS

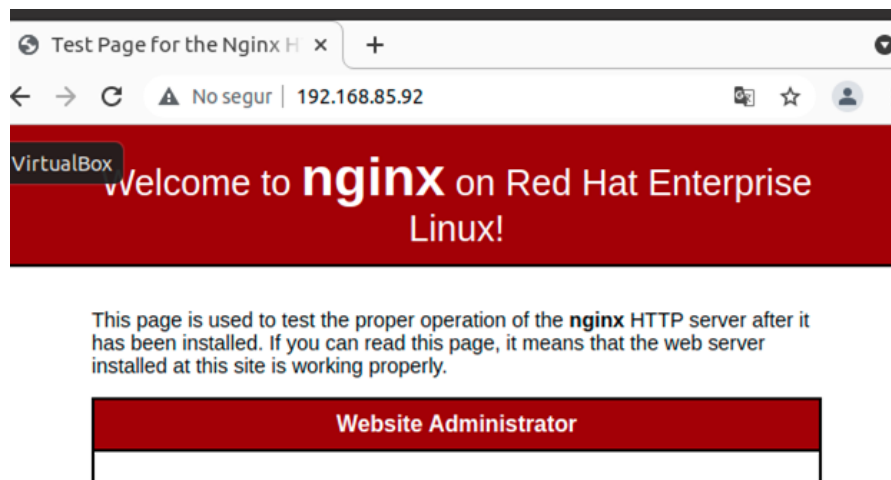
Instalamos el nginx:

```
[root@localhost daw12]# dnf install nginx
```

```
Total download size: 14 M
Installed size: 40 M
Is this ok [y/N]: y
```

Y comprobamos que el servicio funcione:

```
[root@localhost daw12]# systemctl start nginx
[root@localhost daw12]# systemctl status nginx
● nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; v
   Active: active (running) since Tue 2021-10-26 08:16:24 EDT; 5s ago
     Process: 4004 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCC
     Process: 4003 ExecStartPre=/usr/sbin/nginx -t (code=exited, status=
     Process: 4001 ExecStartPre=/usr/bin/rm -f /run/nginx.pid (code=exit
   Main PID: 4006 (nginx)
```



Ahora instalaremos el MariaDB:

```
[root@localhost daw12]# dnf install mariadb-server
Is this ok [y/N]: y
```

Y comprobamos el servicio:

```
[root@localhost daw12]# systemctl start mariadb
[root@localhost daw12]# systemctl status mariadb
● mariadb.service - MariaDB 10.3 database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; vendor preset: enabled)
   Active: active (running) since Tue 2021-10-26 08:23:21 CEST; 1min 1s ago
     Docs: man:mysqld(8)
           https://mariadb.com/kb/en/library/systemd/
   Process: 5050 ExecStartPost=/usr/libexec/mysql-check-upgrade (code=0, status=0/SUCCESS)
   Process: 4915 ExecStartPre=/usr/libexec/mysql_prepare_database (code=0, status=0/SUCCESS)
```

Ahora acabamos la instalacion de MySQL y diremos que no a todo:

```
[root@localhost daw12]# mysql_secure_installation
```

```
Enter current password for root (enter for none):
OK, successfully used password, moving on...
```

```
Set root password? [Y/n] n
... skipping.
```

```
Remove anonymous users? [Y/n] n
... skipping.
```

```
Disallow root login remotely? [Y/n] n
... skipping.
```

```
Remove test database and access to it? [Y/n] n
... skipping.
```

```
Reload privilege tables now? [Y/n] n
... skipping.
```

Ahora lo ejecutaremos y crearemos un usuario y una database:

```
[root@localhost daw12]# mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 9
Server version: 10.3.28-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE example_database;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> GRANT ALL ON example_database.* TO 'example_user'@'localhost' IDENTIFIED BY 'password' WITH GRANT OPTION;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> exit
Bye
[root@localhost daw12]#
```

Y aora con el usuario creado comprobaremos:

```
[root@localhost daw12]# mysql -u example_user -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 10
Server version: 10.3.28-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| example_database |
| information_schema |
+-----+
2 rows in set (0.001 sec)

MariaDB [(none)]>
```

Ahora instalamos los paquetes adicionales de php e instalamos el nano:

Y

```
[root@localhost daw12]# dnf install php-fpm php-mysqld
```

```
[root@localhost daw12]# dnf install nano
```

editamos estos 2 elementos que ponian apache y ponemos nginx:

```
GNU nano 2.9.8 /etc/php-fpm.d/www.conf Moc
; - 'chroot'
; - 'chdir'
; - 'php_values'
; - 'php_admin_values'
; When not set, the global prefix (or @php_fpm_prefix@) applies instead.
; Note: This directive can also be relative to the global prefix.
; Default Value: none
;prefix = /path/to/pools/$pool

; Unix user/group of processes
; Note: The user is mandatory. If the group is not set, the default user
; will be used.
; RPM: The user chosen to provide access to the same directories as ht
user = nginx
; RPM: Keep a group allowed to write in log dir.
group = nginx

; The address on which to accept FastCGI requests.
; Valid syntaxes are:
```

Comprovamos el estado de nginx:

```
[root@localhost daw12]# systemctl start php-fpm
[root@localhost daw12]# systemctl restart nginx
[root@localhost daw12]# systemctl status nginx
● nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; vendor preset: enabled)
   Drop-In: /usr/lib/systemd/system/nginx.service.d
            └─php-fpm.conf
   Active: active (running) since Tue 2021-10-26 08:44:03 EDT; 8s ago
   Process: 5329 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCCESS)
```

Y le damos permisos: al usuario en la tabla

```
[root@localhost daw12]# chown -R daw12.daw12 /usr/share/nginx/html/
```

Y ahora creamos el php y comprobamos que funcione escribiendo la ip y despues el php:

```
08:00:00:00:00:00 brd 00:00:00:00:00:00
/0 scope host lo

daw12@localhost:/home/daw12
GNU nano 2.9.8 /usr/share/nginx/html/info.php
<?php
phpinfo();
?>
```

← → ↻ No segur | 192.168.85.92/info.php ☆ 👤 ⋮

PHP Version 7.2.24

System	Linux localhost.localdomain 4.18.0-338.el8.x86_64 #1 SMP
Build Date	Oct 22 2019 08:28:36
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/

```
centosStream Nginx (Virgen Real) [S'està executant] - Oracle VM Virt
Fitxer Màquina Visualitza Entrada Dispositius Ajuda
[daw12@localhost ~]$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group defe
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP
    link/ether 08:00:27:f4:3e:72 brd ff:ff:ff:ff:ff:ff
    inet 192.168.85.92/24 brd 192.168.85.255 scope global dynamic noprefixroute
        valid_lft 86388sec preferred_lft 86388sec
    inet6 fe80::a00:27ff:fef4:3e72/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[daw12@localhost ~]$ _
```