Ejercicios Tema 01

1) Una plataforma web es el entorno de desarrollo de software empleado para diseñar y ejecutar un sitio web; destacan dos plataformas web: LAMP y WISA. Explica en qué consiste cada una de ellas. ¿Qué otras plataformas existen?

LAMP: Trabaja con software libre, LAMP viene de las iniciales de :

- **Linux:** Sistema operativo.
- **Apache:** Servidor web.
- **MySQL/MariaDB:** Gestor de bases de datos.
- **PHP:** lenguaje interpretado PHP, (en algunos casos puede ser Perl o Python).

WISA: Usa las herramientas propietarias de Microsoft.

- **Windows:** Sistema operativo.
- **Internet Information Services::** Servidor web.
- **SQL Server:** Gestor de base de datos.
- **ASP o ASP.NET:** Lenguaje Scripting del lado del servidor.

Existen otras plataformas como **WAMP**, que viene ser como **LAMP** pero cambiando el S.O por windows, o **WIMP** que seria cambiar Apache por Internet information Services.

2) ¿Qué diferencias y similitudes encuentras entre la escalabilidad horizontal y en clúster?

- **Diferencias:**

La Escabilidad horizontal se centra en agregar más nodos para aumentar la capacidad, en clúster se enfoca en la creación de grupos de nodos que trabajan juntos dandole más robustez.

- **Similitudes:**

Ambas buscan aumentar la capacidad. Distribuir la capacidad de trabajo. Mejorar la disponibilidad y rendimiento.

3) La arquitectura Web es un modelo compuesto de tres capas, ¿cuáles son y cuál es la función de cada una de ellas?

- **Capa presentación:** La encargada de la navegavilidad, formateo de los datos de salida, validación de los datos, etc... Es la capa que ve el usuario.

- **Capa de negocio:** recibe las peticiones del usuario y desde donde se envían las respuestas, se verifica que las reglas establecidas de cumplan (controlador).

- **Capa de acceso de datos:** formada por gestores de datos que se encargan de almacenar, estructurar y recuperar los datos solicitados por la capa anterior (modelo).

4) Sigue los pasos del Anexo I y crea la máquina virtual de Ubuntu Server 20.04 en VirtualBox. Documenta el proceso seguido e incluye capturas de pantalla que muestren que has realizado la tarea.
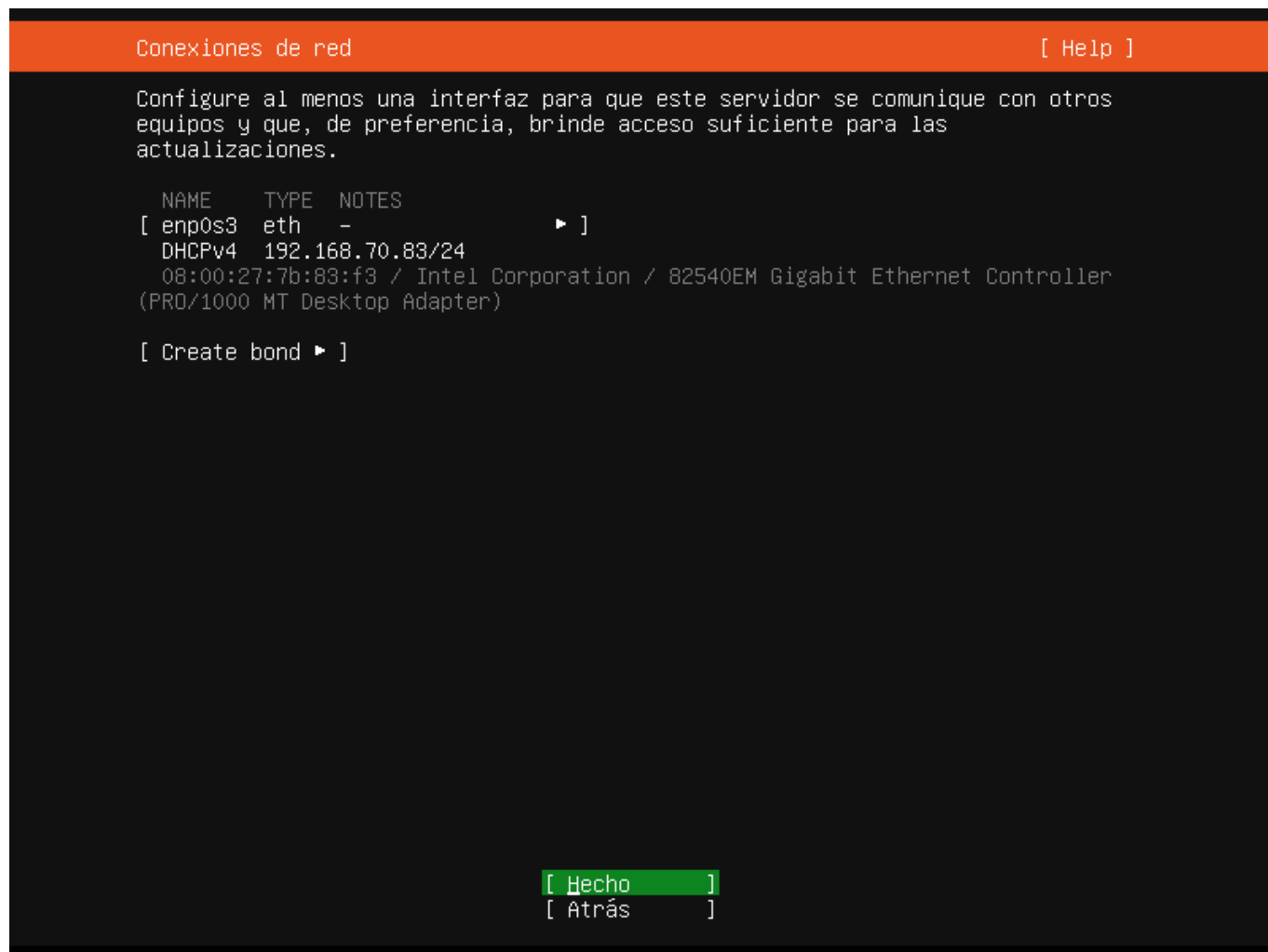
- **Paso 1:**

Elegimos instalar la versión de Ubuntu server por defecto.
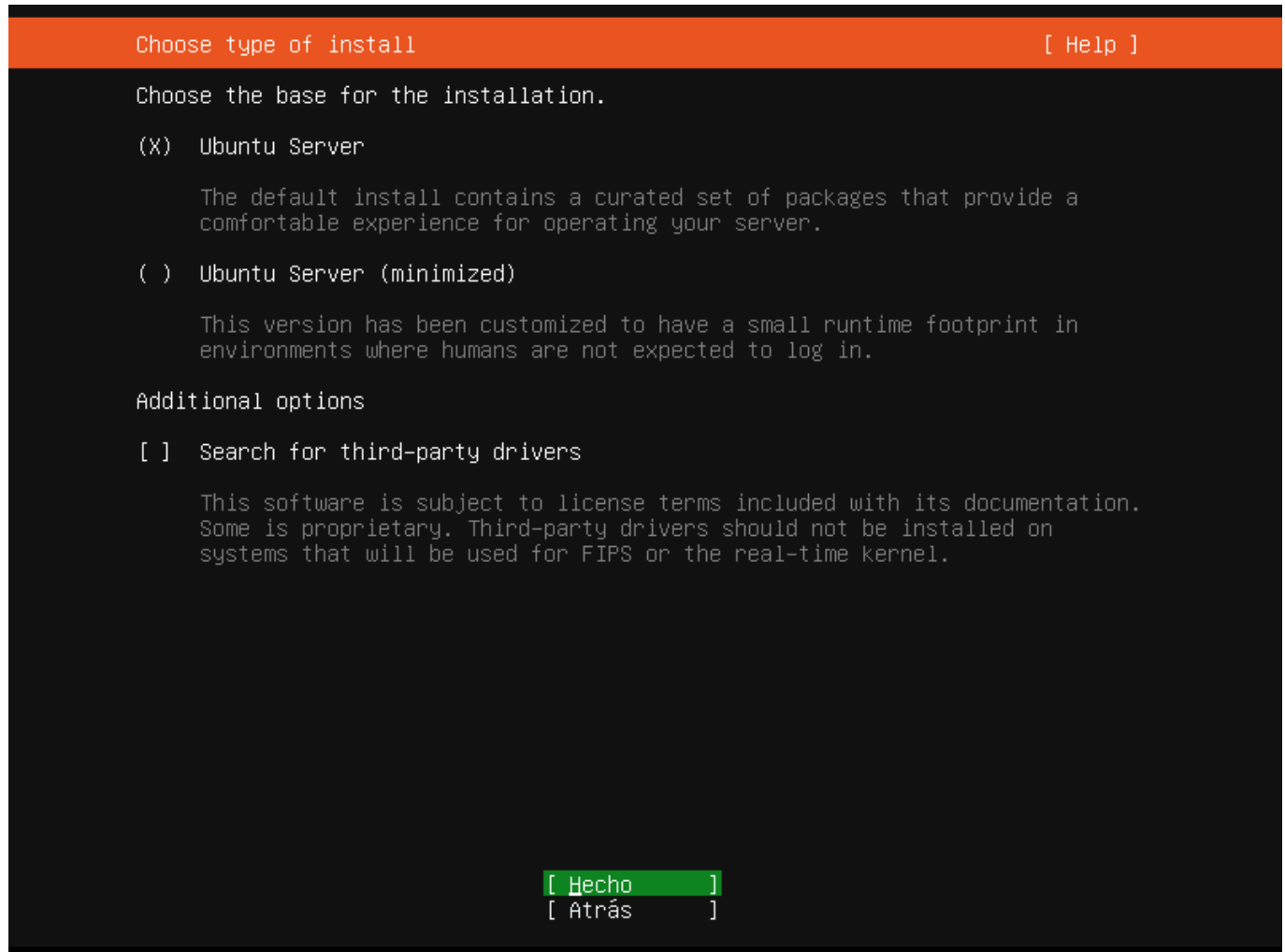
- **Paso 2:**

Al estar en virtualbox la configuración de la máquina virtual en adaptador puente, nos coge una ip por defecto de la misma red local en la que se encuentra nuestro equipo.

Conexiones de red   [Help]

Configure al menos una interfaz para que este servidor se comunique con otros
equipos y que, de preferencia, brinde acceso suficiente para las
actualizaciones.

   NAME   TYPE NOTES
[enp0s3   eth   -   ►]
   DHCPv4 192.168.70.83/24
   08:00:27:7b:83:f3 / Intel Corporation / 82540EM Gigabit Ethernet Controller
(PRO/1000 MT Desktop Adapter)

[Create bond ►]

                              [Hecho   ]
                              [Atrás   ]

- **Paso 3:**

> Mirrors por si acaso no descarga del servidor principal.

- **Paso 4:**

Seleccionamos nuestro HDD por defecto.

```
  Guided storage configuration                                    [ Help ]

  Configure a guided storage layout, or create a custom one:

  (X)  Use an entire disk

       [ VBOX_HARDDISK_VBc49a602f-e2333383 local disk 30.000G ▾ ]

       [X]  Set up this disk as an LVM group

            [ ]  Encrypt the LVM group with LUKS

                        Passphrase:


                 Confirm passphrase:


  ( )  Custom storage layout















                        [ Hecho      ]
                        [ Atrás      ]
```

- **Paso 5:**

Dejamos las particiones que ha creado por defecto.

- **Paso 6:**

Rellenamos los campos.

* **Paso 7:**

> Instalamos SSH para luego poder manejar nuestro servidor desde nuestra máquina mediante ssh.

- **Paso 8:**

Final de la instalación, con el ubuntu server iniciado.

```
Ubuntu 22.04.3 LTS ubuntuserver tty1

ubuntuserver login: rsc
Password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-84-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:      https://landscape.canonical.com
 * Support:         https://ubuntu.com/advantage

 System information disabled due to load higher than 1.0

El mantenimiento de seguridad expandido para Applications está desactivado

Se pueden aplicar 24 actualizaciones de forma inmediata.
Para ver estas actualizaciones adicionales, ejecute: apt list --upgradable

Active ESM Apps para recibir futuras actualizaciones de seguridad adicionales.
Vea https://ubuntu.com/esm o ejecute «sudo pro status»



The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

rsc@ubuntuserver:~$ _
```

5) Investiga en la web para qué se utiliza la herramienta curl (puedes ejecutar man curl para obtener ayuda). Indica que es lo que hacen los siguientes comandos:

- **curl www.google.es:** Realiza una petición GET a la url de google, obteniendo los datos(mayormente el HTML y las cabeceras).
- **curl --request GET www.google.es**: Realiza la misma petición GET que el anterior, porque request es para HTTP, que es por defecto lo que hace la anterior.
- **curl -X GET www.google.es**: Tiene el mismo resultado que las anteriores. El -X se utiliza para establecer el método HTTP que se usará.
- **curl -X GET -I www.google.es**: Este solo hace petición de los datos de la cabecera, ya que el -I es equivalente a --head.
- **curl -X GET -i www.google.es**: Igual que los primeros, pero este incluye la cabecera por el -i

6) Dispones de máquinas que cuentan con el sistema operativo Ubuntu Server y Windows, tienen el entorno de red configurado y disponen de conexión a Internet. Además, se tiene acceso a la cuenta del usuario root o Administrador en cada caso. Indicar los pasos y comandos implicados para conseguir hacer lo siguiente (documentar el proceso de instalación y configuración).

Paso 1:

Instalación Apache.

```
Desempaquetando apache2-bin (2.4.52-1ubuntu4.6) ...
Seleccionando el paquete apache2-data previamente no seleccionado.
Preparando para desempaquetar .../06-apache2-data_2.4.52-1ubuntu4.6_all.deb ...
Desempaquetando apache2-data (2.4.52-1ubuntu4.6) ...
Seleccionando el paquete apache2-utils previamente no seleccionado.
Preparando para desempaquetar .../07-apache2-utils_2.4.52-1ubuntu4.6_amd64.deb ...
Desempaquetando apache2-utils (2.4.52-1ubuntu4.6) ...
Seleccionando el paquete mailcap previamente no seleccionado.
Preparando para desempaquetar .../08-mailcap_3.70+nmu1ubuntu1_all.deb ...
Desempaquetando mailcap (3.70+nmu1ubuntu1) ...
Seleccionando el paquete mime-support previamente no seleccionado.
Preparando para desempaquetar .../09-mime-support_3.66_all.deb ...
Desempaquetando mime-support (3.66) ...
Seleccionando el paquete apache2 previamente no seleccionado.
Preparando para desempaquetar .../10-apache2_2.4.52-1ubuntu4.6_amd64.deb ...
Desempaquetando apache2 (2.4.52-1ubuntu4.6) ...
Seleccionando el paquete bzip2 previamente no seleccionado.
Preparando para desempaquetar .../11-bzip2_1.0.8-5build1_amd64.deb ...
Desempaquetando bzip2 (1.0.8-5build1) ...
Seleccionando el paquete ssl-cert previamente no seleccionado.
Preparando para desempaquetar .../12-ssl-cert_1.1.2_all.deb ...
Desempaquetando ssl-cert (1.1.2) ...
Configurando libapr1:amd64 (1.7.0-8ubuntu0.22.04.1) ...
Configurando bzip2 (1.0.8-5build1) ...
Configurando ssl-cert (1.1.2) ...
Configurando liblua5.3-0:amd64 (5.3.6-1build1) ...
Configurando apache2-data (2.4.52-1ubuntu4.6) ...
Configurando mailcap (3.70+nmu1ubuntu1) ...
Configurando libaprutil1:amd64 (1.6.1-5ubuntu4.22.04.2) ...
Configurando mime-support (3.66) ...
Configurando libaprutil1-ldap:amd64 (1.6.1-5ubuntu4.22.04.2) ...
Configurando libaprutil1-dbd-sqlite3:amd64 (1.6.1-5ubuntu4.22.04.2) ...
Configurando apache2-utils (2.4.52-1ubuntu4.6) ...
Configurando apache2-bin (2.4.52-1ubuntu4.6) ...
Configurando apache2 (2.4.52-1ubuntu4.6) ...

Progreso: [ 94%] [###############################################################################.....]
```

Paso 2:

Comprobamos que el estado de apache esta OK.

```
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/ap
ache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/syste
md/system/apache-htcacheclean.service.
Procesando disparadores para ufw (0.36.1-4ubuntu0.1) ...
Procesando disparadores para man-db (2.10.2-1) ...
Procesando disparadores para libc-bin (2.35-0ubuntu3.3) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
rsc@ubuntuserver:~$ systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2023-09-25 08:31:32 UTC; 28s ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2494 (apache2)
      Tasks: 55 (limit: 2221)
     Memory: 4.9M
        CPU: 38ms
     CGroup: /system.slice/apache2.service
             ├─2494 /usr/sbin/apache2 -k start
             ├─2496 /usr/sbin/apache2 -k start
             └─2497 /usr/sbin/apache2 -k start

sep 25 08:31:32 ubuntuserver systemd[1]: Starting The Apache HTTP Server...
sep 25 08:31:32 ubuntuserver apachectl[2493]: AH00558: apache2: Could not reliably determine the se
sep 25 08:31:32 ubuntuserver systemd[1]: Started The Apache HTTP Server.
rsc@ubuntuserver:~$ sudo apt install net-tools _
```

Paso 3:

> Comprobamos desde nuestra máquina si esta levantado el servidor, introduciendo nuestra ip del servidor
> ubuntu.

Apache2 Default Page

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.

Document Roots

By default, Ubuntu does not allow access through the web browser to *any* file outside of those located in `/var/www`, **public_html** directories (when enabled) and `/usr/share` (for web applications). If your site is using a web document root located elsewhere (such as in `/srv`) you may need to whitelist your document root directory in `/etc/apache2 /apache2.conf`.

The default Ubuntu document root is `/var/www/html`. You can make your own virtual hosts under /var/www.

Reporting Problems

Please use the `ubuntu-bug` tool to report bugs in the Apache2 package with Ubuntu. However, check **existing bug reports** before reporting a new bug.

Please report bugs specific to modules (such as PHP and others) to their respective packages, not to the web server itself.

Paso 4:

> Concedemos permisos para no tener que estar usando sudo.

```
Desempaquetando net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Configurando net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Procesando disparadores para man-db (2.10.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.                         13 / 26

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
rsc@ubuntuserver:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    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 group default qlen 100
0
    link/ether 08:00:27:7b:83:f3 brd ff:ff:ff:ff:ff:ff
    inet 192.168.70.131/24 metric 100 brd 192.168.70.255 scope global dynamic enp0s3
       valid_lft 536sec preferred_lft 536sec
    inet6 fe80::a00:27ff:fe7b:83f3/64 scope link
       valid_lft forever preferred_lft forever
rsc@ubuntuserver:~$ cd /var/www/html/
rsc@ubuntuserver:/var/www/html$ ls
index.html
rsc@ubuntuserver:/var/www/html$ cd
rsc@ubuntuserver:~$ sudo chown -R www-data:www-data /var/www/html/
rsc@ubuntuserver:~$ sudo chmod -R 775 /var/www/html/
rsc@ubuntuserver:~$ sudo usermod -a -G www-data rsc
rsc@ubuntuserver:~$ _
```

Paso 5:

Creamos una web para probar el servidor.

```
html
        <body>

        <h1>Este es el contacto de Rogelio Sánchez</h1>
        <p> Bienvenido</p>


        </body>
</html>
                                                    14 / 26
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
"contacto.html" [Sólo lectura] 9L, 105B                    1,1        Todo
```

Paso 6:

Probamos la web desde nuestra máquina con la dirección ip del servidor.

Este es el contacto de Rogelio SÃ¡nchez

Bienvenido

Paso 7:

Instalamos MariaDB, comprobamos que este OK

```
No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
rsc@ubuntuserver:~$ systemctl status mariadb
● mariadb.service - MariaDB 10.6.12 database server
     Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor preset: enabled)
     Active: active (running) since Thu 2023-09-28 06:35:20 UTC; 30s ago
       Docs: man:mariadbd(8)
             https://mariadb.com/kb/en/library/systemd/
    Process: 2105 ExecStartPre=/usr/bin/install -m 755 -o mysql -g root -d /var/run/mysqld (code=ex>
    Process: 2106 ExecStartPre=/bin/sh -c systemctl unset-environment _WSREP_START_POSITION (code=e>
    Process: 2108 ExecStartPre=/bin/sh -c [ ! -e /usr/bin/galera_recovery ] && VAR= ||   VAR=`cd /u>
    Process: 2146 ExecStartPost=/bin/sh -c systemctl unset-environment _WSREP_START_POSITION (code=>
    Process: 2148 ExecStartPost=/etc/mysql/debian-start (code=exited, status=0/SUCCESS)
   Main PID: 2137 (mariadbd)
     Status: "Taking your SQL requests now..."
      Tasks: 10 (limit: 2221)
     Memory: 61.0M
        CPU: 510ms
     CGroup: /system.slice/mariadb.service
             └─2137 /usr/sbin/mariadbd

sep 28 06:35:20 ubuntuserver mariadbd[2137]: Version: '10.6.12-MariaDB-0ubuntu0.22.04.1'  socket: '>
sep 28 06:35:20 ubuntuserver systemd[1]: Started MariaDB 10.6.12 database server.
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2150]: Upgrading MySQL tables if necessary.
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2153]: Looking for 'mariadb' as: /usr/bin/mari>
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2153]: Looking for 'mariadb-check' as: /usr/bi>
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2153]: This installation of MariaDB is already>
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2153]: There is no need to run mysql_upgrade a>
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2153]: You can use --force if you still want t>
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2161]: Checking for insecure root accounts.
sep 28 06:35:20 ubuntuserver /etc/mysql/debian-start[2165]: Triggering myisam-recover for all MyISA>
rsc@ubuntuserver:~$ _
```

Paso 8:

Instalamos php y comprobamos si esta instalad.

```
 -d foo[=bar]      Define INI entry foo with value 'bar'
 -e                Generate extended information for debugger/profiler
 -f <file>         Parse and execute <file>.
 -h                This help
 -i                PHP information
 -l                Syntax check only (lint)
 -m                Show compiled in modules
 -r <code>         Run PHP <code> without using script tags <?..?>
 -B <begin_code>   Run PHP <begin_code> before processing input lines
 -R <code>         Run PHP <code> for every input line
 -F <file>         Parse and execute <file> for every input line
 -E <end_code>     Run PHP <end_code> after processing all input lines
 -H                Hide any passed arguments from external tools.
 -S <addr>:<port>  Run with built-in web server.
 -t <docroot>      Specify document root <docroot> for built-in web server.
 -s                Output HTML syntax highlighted source.
 -v                Version number
 -w                Output source with stripped comments and whitespace.
 -z <file>         Load Zend extension <file>.

 args...           Arguments passed to script. Use -- args when first argument
                   starts with - or script is read from stdin

 --ini             Show configuration file names

 --rf <name>       Show information about function <name>.
 --rc <name>       Show information about class <name>.
 --re <name>       Show information about extension <name>.
 --rz <name>       Show information about Zend extension <name>.
 --ri <name>       Show configuration for extension <name>.

rsc@ubuntuserver:~$ php -v
PHP 8.1.2-1ubuntu2.14 (cli) (built: Aug 18 2023 11:41:11) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1ubuntu2.14, Copyright (c), by Zend Technologies
rsc@ubuntuserver:~$ _
```

Paso 9:

Creamos un script info.php y accedemos a el desde nuestro navegador

PHP Version 8.1.2-1ubuntu2.14

System	Linux ubuntuserver 5.15.0-84-generic #93-Ubuntu SMP Tue Sep 5 17:16:10 UTC 2023 x86_64
Build Date	Aug 18 2023 11:41:11
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.1/apache2
Loaded Configuration File	/etc/php/8.1/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.1/apache2/conf.d
Additional .ini files parsed	/etc/php/8.1/apache2/conf.d/10-mysqlnd.ini, /etc/php/8.1/apache2/conf.d/10-opcache.ini, /etc/php/8.1/apache2/conf.d/10-pdo.ini, /etc/php/8.1/apache2/conf.d/20-calendar.ini, /etc/php/8.1/apache2/conf.d/20-ctype.ini, /etc/php/8.1/apache2/conf.d/20-exif.ini, /etc/php/8.1/apache2/conf.d/20-ffi.ini, /etc/php/8.1/apache2/conf.d/20-fileinfo.ini, /etc/php/8.1/apache2/conf.d/20-ftp.ini, /etc/php/8.1/apache2/conf.d/20-gettext.ini, /etc/php/8.1/apache2/conf.d/20-iconv.ini, /etc/php/8.1/apache2/conf.d/20-mysqli.ini, /etc/php/8.1/apache2/conf.d/20-pdo_mysql.ini, /etc/php/8.1/apache2/conf.d/20-phar.ini, /etc/php/8.1/apache2/conf.d/20-posix.ini, /etc/php/8.1/apache2/conf.d/20-readline.ini, /etc/php/8.1/apache2/conf.d/20-shmop.ini, /etc/php/8.1/apache2/conf.d/20-sockets.ini, /etc/php/8.1/apache2/conf.d/20-sysvmsg.ini, /etc/php/8.1/apache2/conf.d/20-sysvsem.ini, /etc/php/8.1/apache2/conf.d/20-sysvshm.ini, /etc/php/8.1/apache2/conf.d/20-tokenizer.ini
PHP API	20210902
PHP Extension	20210902
Zend Extension	420210902
Zend Extension Build	API420210902,NTS
PHP Extension Build	API20210902,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, convert.*, consumed, dechunk, convert.iconv.*

This program makes use of the Zend Scripting Language Engine:
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1ubuntu2.14, Copyright (c), by Zend Technologies

Configuration

apache2handler

Apache Version	Apache/2.4.52 (Ubuntu)
Apache API Version	20120211
Server Administrator	webmaster@localhost
Hostname:Port	127.0.1.1:80
User/Group	www-data(33)/33
Max Requests	Per Child: 0 - Keep Alive: on - Max Per Connection: 100
Timeouts	Connection: 300 - Keep-Alive: 5
Virtual Server	Yes
Server Root	/etc/apache2
Loaded Modules	core mod_so mod_watchdog http_core mod_log_config mod_logio mod_version mod_unixd mod_access_compat mod_alias mod_auth_basic mod_authn_core mod_authn_file mod_authz_core mod_authz_host mod_authz_user mod_autoindex mod_deflate mod_dir mod_env mod_filter mod_mime prefork mod_negotiation mod_php mod_reqtimeout mod_setenvif mod_status

Directive	Local Value	Master Value
engine	On	On
last_modified	Off	Off
xbithack	Off	Off

Apache Environment

Variable	Value
HTTP_HOST	192.168.70.130
HTTP_USER_AGENT	Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/118.0
HTTP_ACCEPT	text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
HTTP_ACCEPT_LANGUAGE	es-ES,es;q=0.8,en-US;q=0.5,en;q=0.3
HTTP_ACCEPT_ENCODING	gzip, deflate
HTTP_CONNECTION	keep-alive
HTTP_UPGRADE_INSECURE_REQUESTS	1
PATH	/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin
SERVER_SIGNATURE	<address>Apache/2.4.52 (Ubuntu) Server at 192.168.70.130 Port 80</address>
SERVER_SOFTWARE	Apache/2.4.52 (Ubuntu)
SERVER_NAME	192.168.70.130
SERVER_ADDR	192.168.70.130
SERVER_PORT	80
REMOTE_ADDR	192.168.70.96
DOCUMENT_ROOT	/var/www/html
REQUEST_SCHEME	http
CONTEXT_PREFIX	*no value*
CONTEXT_DOCUMENT_ROOT	/var/www/html
SERVER_ADMIN	webmaster@localhost
SCRIPT_FILENAME	/var/www/html/info.php
REMOTE_PORT	56538
GATEWAY_INTERFACE	CGI/1.1
SERVER_PROTOCOL	HTTP/1.1
REQUEST_METHOD	GET
QUERY_STRING	*no value*
REQUEST_URI	/info.php
SCRIPT_NAME	/info.php

HTTP Headers Information

HTTP Request Headers	
HTTP Request	GET /info.php HTTP/1.1
Host	192.168.70.130
User-Agent	Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/118.0
Accept	text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
Accept-Language	es-ES,es;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding	gzip, deflate
Connection	keep-alive
Upgrade-Insecure-Requests	1
HTTP Response Headers	

calendar

Calendar support	enabled

Core

PHP Version	8.1.2-1ubuntu2.14

Directive	Local Value	Master Value
allow_url_fopen	On	On
allow_url_include	Off	Off
arg_separator.input	&	&
arg_separator.output	&	&
auto_append_file	*no value*	*no value*
auto_globals_jit	On	On
auto_prepend_file	*no value*	*no value*
browscap	*no value*	*no value*
default_charset	UTF-8	UTF-8
default_mimetype	text/html	text/html
disable_classes	*no value*	*no value*
disable_functions	*no value*	*no value*
display_errors	Off	Off
display_startup_errors	Off	Off
doc_root	*no value*	*no value*

	Local Value	Master Value
docref_ext	*no value*	*no value*
docref_root	*no value*	*no value*
enable_dl	Off	Off
enable_post_data_reading	On	On
error_append_string	*no value*	*no value*
error_log	*no value*	*no value*
error_prepend_string	*no value*	*no value*
error_reporting	22527	22527
expose_php	Off	Off
extension_dir	/usr/lib/php/20210902	/usr/lib/php/20210902
fiber.stack_size	*no value*	*no value*
file_uploads	On	On
hard_timeout	2	2
highlight.comment	#FF8000	#FF8000
highlight.default	#0000BB	#0000BB
highlight.html	#000000	#000000
highlight.keyword	#007700	#007700
highlight.string	#DD0000	#DD0000
html_errors	On	On
ignore_repeated_errors	Off	Off
ignore_repeated_source	Off	Off
ignore_user_abort	Off	Off
implicit_flush	Off	Off
include_path	.:/usr/share/php	.:/usr/share/php
input_encoding	*no value*	*no value*
internal_encoding	*no value*	*no value*
log_errors	On	On
mail.add_x_header	Off	Off
mail.force_extra_parameters	*no value*	*no value*
mail.log	*no value*	*no value*
max_execution_time	30	30
max_file_uploads	20	20
max_input_nesting_level	64	64
max_input_time	60	60
max_input_vars	1000	1000
max_multipart_body_parts	-1	-1
memory_limit	128M	128M
open_basedir	*no value*	*no value*
output_buffering	4096	4096
output_encoding	*no value*	*no value*
output_handler	*no value*	*no value*
post_max_size	8M	8M
precision	14	14
realpath_cache_size	4096K	4096K
realpath_cache_ttl	120	120
register_argc_argv	Off	Off
report_memleaks	On	On
report_zend_debug	Off	Off
request_order	GP	GP
sendmail_from	*no value*	*no value*
sendmail_path	/usr/sbin/sendmail -t -i	/usr/sbin/sendmail -t -i
serialize_precision	-1	-1
short_open_tag	Off	Off
SMTP	localhost	localhost
smtp_port	25	25
sys_temp_dir	*no value*	*no value*
syslog.facility	LOG_USER	LOG_USER
syslog.filter	no-ctrl	no-ctrl
syslog.ident	php	php
unserialize_callback_func	*no value*	*no value*
upload_max_filesize	2M	2M
upload_tmp_dir	*no value*	*no value*
user_dir	*no value*	*no value*
user_ini.cache_ttl	300	300
user_ini.filename	.user.ini	.user.ini
variables_order	GPCS	GPCS
xmlrpc_error_number	0	0
xmlrpc_errors	Off	Off
zend.assertions	-1	-1
zend.detect_unicode	On	On
zend.enable_gc	On	On
zend.exception_ignore_args	On	On
zend.exception_string_param_max_len	0	0
zend.multibyte	Off	Off
zend.script_encoding	*no value*	*no value*
zend.signal_check	Off	Off

ctype

ctype functions	enabled

date

date/time support	enabled
timelib version	2021.11
"Olson" Timezone Database Version	0.system
Timezone Database	internal
Default timezone	UTC

Directive	Local Value	Master Value

date.default_latitude	31.7667	31.7667
date.default_longitude	35.2333	35.2333
date.sunrise_zenith	90.833333	90.833333
date.sunset_zenith	90.833333	90.833333
date.timezone	no value	no value

exif

EXIF Support	enabled
Supported EXIF Version	0220
Supported filetypes	JPEG, TIFF
Multibyte decoding support using mbstring	disabled
Extended EXIF tag formats	Canon, Casio, Fujifilm, Nikon, Olympus, Samsung, Panasonic, DJI, Sony, Pentax, Minolta, Sigma, Foveon, Kyocera, Ricoh, AGFA, Epson

Directive	Local Value	Master Value
exif.decode_jis_intel	JIS	JIS
exif.decode_jis_motorola	JIS	JIS
exif.decode_unicode_intel	UCS-2LE	UCS-2LE
exif.decode_unicode_motorola	UCS-2BE	UCS-2BE
exif.encode_jis	no value	no value
exif.encode_unicode	ISO-8859-15	ISO-8859-15

FFI

FFI support		enabled

Directive	Local Value	Master Value
ffi.enable	preload	preload
ffi.preload	no value	no value

fileinfo

fileinfo support	enabled
libmagic	540

filter

Input Validation and Filtering	enabled

Directive	Local Value	Master Value
filter.default	unsafe_raw	unsafe_raw
filter.default_flags	no value	no value

ftp

FTP support	enabled
FTPS support	enabled

gettext

GetText Support	enabled

hash

hash support	enabled
Hashing Engines	md2 md4 md5 sha1 sha224 sha256 sha384 sha512/224 sha512/256 sha512 sha3-224 sha3-256 sha3-384 sha3-512 ripemd128 ripemd160 ripemd256 ripemd320 whirlpool tiger128,3 tiger160,3 tiger192,3 tiger128,4 tiger160,4 tiger192,4 snefru snefru256 gost gost-crypto adler32 crc32 crc32b crc32c fnv132 fnv1a32 fnv164 fnv1a64 joaat murmur3a murmur3c murmur3f xxh32 xxh64 xxh3 xxh128 haval128,3 haval160,3 haval192,3 haval224,3 haval256,3 haval128,4 haval160,4 haval192,4 haval224,4 haval256,4 haval128,5 haval160,5 haval192,5 haval224,5 haval256,5

MHASH support	Enabled
MHASH API Version	Emulated Support

iconv

iconv support	enabled
iconv implementation	glibc
iconv library version	2.35

Directive	Local Value	Master Value
iconv.input_encoding	no value	no value
iconv.internal_encoding	no value	no value
iconv.output_encoding	no value	no value

json

json support	enabled

libxml

libXML support	active
libXML Compiled Version	2.9.13
libXML Loaded Version	20913
libXML streams	enabled

mysqli

Mysqli Support	enabled
Client API library version	mysqlnd 8.1.2-1ubuntu2.14
Active Persistent Links	0
Inactive Persistent Links	0
Active Links	0

Directive	Local Value	Master Value
mysqli.allow_local_infile	Off	Off

mysqli.allow_persistent	On	On
mysqli.default_host	*no value*	*no value*
mysqli.default_port	3306	3306
mysqli.default_pw	*no value*	*no value*
mysqli.default_socket	/var/run/mysqld/mysqld.sock	/var/run/mysqld/mysqld.sock
mysqli.default_user	*no value*	*no value*
mysqli.local_infile_directory	*no value*	*no value*
mysqli.max_links	Unlimited	Unlimited
mysqli.max_persistent	Unlimited	Unlimited
mysqli.reconnect	Off	Off
mysqli.rollback_on_cached_plink	Off	Off

mysqlnd

mysqlnd	enabled
Version	mysqlnd 8.1.2-1ubuntu2.14
Compression	supported
core SSL	supported
extended SSL	supported
Command buffer size	4096
Read buffer size	32768
Read timeout	86400
Collecting statistics	Yes
Collecting memory statistics	No
Tracing	n/a
Loaded plugins	mysqlnd,debug_trace,auth_plugin_mysql_native_password,auth_plugin_mysql_clear_password,auth_plugin_caching_sha2_password,auth_plugin_sha256_password
API Extensions	mysqli,pdo_mysql

openssl

OpenSSL support	enabled
OpenSSL Library Version	OpenSSL 3.0.2 15 Mar 2022
OpenSSL Header Version	OpenSSL 3.0.2 15 Mar 2022
Openssl default config	/usr/lib/ssl/openssl.cnf

Directive	Local Value	Master Value
openssl.cafile	*no value*	*no value*
openssl.capath	*no value*	*no value*

pcre

PCRE (Perl Compatible Regular Expressions) Support	enabled
PCRE Library Version	10.39 2021-10-29
PCRE Unicode Version	14.0.0
PCRE JIT Support	enabled
PCRE JIT Target	x86 64bit (little endian + unaligned)

Directive	Local Value	Master Value
pcre.backtrack_limit	1000000	1000000
pcre.jit	1	1
pcre.recursion_limit	100000	100000

PDO

PDO support	enabled
PDO drivers	mysql

pdo_mysql

PDO Driver for MySQL	enabled
Client API version	mysqlnd 8.1.2-1ubuntu2.14

Directive	Local Value	Master Value
pdo_mysql.default_socket	/var/run/mysqld/mysqld.sock	/var/run/mysqld/mysqld.sock

Phar

Phar: PHP Archive support	enabled
Phar API version	1.1.1
Phar-based phar archives	enabled
Tar-based phar archives	enabled
ZIP-based phar archives	enabled
gzip compression	enabled
bzip2 compression	disabled (install ext/bz2)
Native OpenSSL support	enabled

Phar based on pear/PHP_Archive, original concept by Davey Shafik. Phar fully realized by Gregory Beaver and Marcus Boerger. Portions of tar implementation Copyright (c) 2003-2009 Tim Kientzle.

Directive	Local Value	Master Value
phar.cache_list	*no value*	*no value*
phar.readonly	On	On
phar.require_hash	On	On

posix

POSIX support	enabled

readline

Readline Support	enabled
Readline library	EditLine wrapper

Directive	Local Value	Master Value
cli.pager	*no value*	*no value*
cli.prompt	\b \>	\b \>

Reflection

Reflection	enabled

session

Session Support	enabled
Registered save handlers	files user
Registered serializer handlers	php_serialize php php_binary

Directive	Local Value	Master Value
session.auto_start	Off	Off
session.cache_expire	180	180
session.cache_limiter	nocache	nocache
session.cookie_domain	*no value*	*no value*
session.cookie_httponly	*no value*	*no value*
session.cookie_lifetime	0	0
session.cookie_path	/	/
session.cookie_samesite	*no value*	*no value*
session.cookie_secure	0	0
session.gc_divisor	1000	1000
session.gc_maxlifetime	1440	1440
session.gc_probability	0	0
session.lazy_write	On	On
session.name	PHPSESSID	PHPSESSID
session.referer_check	*no value*	*no value*
session.save_handler	files	files
session.save_path	/var/lib/php/sessions	/var/lib/php/sessions
session.serialize_handler	php	php
session.sid_bits_per_character	5	5
session.sid_length	26	26
session.upload_progress.cleanup	On	On
session.upload_progress.enabled	On	On
session.upload_progress.freq	1%	1%
session.upload_progress.min_freq	1	1
session.upload_progress.name	PHP_SESSION_UPLOAD_PROGRESS	PHP_SESSION_UPLOAD_PROGRESS
session.upload_progress.prefix	upload_progress_	upload_progress_
session.use_cookies	1	1
session.use_only_cookies	1	1
session.use_strict_mode	0	0
session.use_trans_sid	0	0

shmop

shmop support	enabled

sockets

Sockets Support	enabled

sodium

sodium support	enabled
libsodium headers version	1.0.18
libsodium library version	1.0.18

SPL

SPL support	enabled
Interfaces	OuterIterator, RecursiveIterator, SeekableIterator, SplObserver, SplSubject
Classes	AppendIterator, ArrayIterator, ArrayObject, BadFunctionCallException, BadMethodCallException, CachingIterator, CallbackFilterIterator, DirectoryIterator, DomainException, EmptyIterator, FilesystemIterator, FilterIterator, GlobIterator, InfiniteIterator, InvalidArgumentException, IteratorIterator, LengthException, LimitIterator, LogicException, MultipleIterator, NoRewindIterator, OutOfBoundsException, OutOfRangeException, OverflowException, ParentIterator, RangeException, RecursiveArrayIterator, RecursiveCachingIterator, RecursiveCallbackFilterIterator, RecursiveDirectoryIterator, RecursiveFilterIterator, RecursiveIteratorIterator, RecursiveRegexIterator, RecursiveTreeIterator, RegexIterator, RuntimeException, SplDoublyLinkedList, SplFileInfo, SplFileObject, SplFixedArray, SplHeap, SplMinHeap, SplMaxHeap, SplObjectStorage, SplPriorityQueue, SplQueue, SplStack, SplTempFileObject, UnderflowException, UnexpectedValueException

standard

Dynamic Library Support	enabled
Path to sendmail	/usr/sbin/sendmail -t -i

Directive	Local Value	Master Value
assert.active	On	On
assert.bail	Off	Off
assert.callback	*no value*	*no value*
assert.exception	On	On
assert.warning	On	On
auto_detect_line_endings	Off	Off
default_socket_timeout	60	60
from	*no value*	*no value*
session.trans_sid_hosts	*no value*	*no value*
session.trans_sid_tags	a=href,area=href,frame=src,form=	a=href,area=href,frame=src,form=
unserialize_max_depth	4096	4096
url_rewriter.hosts	*no value*	*no value*
url_rewriter.tags	form=	form=
user_agent	*no value*	*no value*

sysvmsg

sysvmsg support	enabled

sysvsem

sysvsem support	enabled

sysvshm

sysvshm support	enabled

tokenizer

Tokenizer Support	enabled

Zend OPcache

Opcode Caching	Up and Running
Optimization	Enabled
SHM Cache	Enabled
File Cache	Disabled
JIT	Disabled
Startup	OK
Shared memory model	mmap
Cache hits	0
Cache misses	1
Used memory	9168480
Free memory	125049248
Wasted memory	0
Interned Strings Used memory	221464
Interned Strings Free memory	6069528
Cached scripts	1
Cached keys	1
Max keys	16229
OOM restarts	0
Hash keys restarts	0
Manual restarts	0

Directive	Local Value	Master Value
opcache.blacklist_filename	*no value*	*no value*
opcache.consistency_checks	0	0
opcache.dups_fix	Off	Off
opcache.enable	On	On
opcache.enable_cli	Off	Off
opcache.enable_file_override	Off	Off
opcache.error_log	*no value*	*no value*
opcache.file_cache	*no value*	*no value*
opcache.file_cache_consistency_checks	On	On
opcache.file_cache_only	Off	Off
opcache.file_update_protection	2	2
opcache.force_restart_timeout	180	180
opcache.huge_code_pages	Off	Off
opcache.interned_strings_buffer	8	8
opcache.jit	tracing	tracing
opcache.jit_bisect_limit	0	0
opcache.jit_blacklist_root_trace	16	16
opcache.jit_blacklist_side_trace	8	8
opcache.jit_buffer_size	0	0
opcache.jit_debug	0	0
opcache.jit_hot_func	127	127
opcache.jit_hot_loop	64	64
opcache.jit_hot_return	8	8
opcache.jit_hot_side_exit	8	8
opcache.jit_max_exit_counters	8192	8192
opcache.jit_max_loop_unrolls	8	8
opcache.jit_max_polymorphic_calls	2	2
opcache.jit_max_recursive_calls	2	2
opcache.jit_max_recursive_returns	2	2
opcache.jit_max_root_traces	1024	1024
opcache.jit_max_side_traces	128	128
opcache.jit_prof_threshold	0.005	0.005
opcache.lockfile_path	/tmp	/tmp
opcache.log_verbosity_level	1	1
opcache.max_accelerated_files	10000	10000
opcache.max_file_size	0	0
opcache.max_wasted_percentage	5	5
opcache.memory_consumption	128	128
opcache.opt_debug_level	0	0
opcache.optimization_level	0x7FFEBFFF	0x7FFEBFFF
opcache.preferred_memory_model	*no value*	*no value*
opcache.preload	*no value*	*no value*
opcache.preload_user	*no value*	*no value*
opcache.protect_memory	Off	Off
opcache.record_warnings	Off	Off
opcache.restrict_api	*no value*	*no value*
opcache.revalidate_freq	2	2
opcache.revalidate_path	Off	Off
opcache.save_comments	On	On
opcache.use_cwd	On	On
opcache.validate_permission	Off	Off
opcache.validate_root	Off	Off

opcache.validate_timestamps	On	On

zlib

ZLib Support	enabled
Stream Wrapper	compress.zlib://
Stream Filter	zlib.inflate, zlib.deflate
Compiled Version	1.2.11
Linked Version	1.2.11

Directive	Local Value	Master Value
zlib.output_compression	Off	Off
zlib.output_compression_level	-1	-1
zlib.output_handler	no value	no value

Additional Modules

Module Name

Environment

Variable	Value
APACHE_RUN_DIR	/var/run/apache2
SYSTEMD_EXEC_PID	10084
APACHE_PID_FILE	/var/run/apache2/apache2.pid
JOURNAL_STREAM	8:38412
PATH	/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin
INVOCATION_ID	e8c5c8400f72472886afa38a607f29ef
APACHE_LOCK_DIR	/var/lock/apache2
LANG	C
APACHE_RUN_USER	www-data
APACHE_RUN_GROUP	www-data
APACHE_LOG_DIR	/var/log/apache2
PWD	/

PHP Variables

Variable	Value
$_SERVER['HTTP_HOST']	192.168.70.130
$_SERVER['HTTP_USER_AGENT']	Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/118.0
$_SERVER['HTTP_ACCEPT']	text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
$_SERVER['HTTP_ACCEPT_LANGUAGE']	es-ES,es;q=0.8,en-US;q=0.5,en;q=0.3
$_SERVER['HTTP_ACCEPT_ENCODING']	gzip, deflate
$_SERVER['HTTP_CONNECTION']	keep-alive
$_SERVER['HTTP_UPGRADE_INSECURE_REQUESTS']	1
$_SERVER['PATH']	/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin
$_SERVER['SERVER_SIGNATURE']	<address>Apache/2.4.52 (Ubuntu) Server at 192.168.70.130 Port 80</address>
$_SERVER['SERVER_SOFTWARE']	Apache/2.4.52 (Ubuntu)
$_SERVER['SERVER_NAME']	192.168.70.130
$_SERVER['SERVER_ADDR']	192.168.70.130
$_SERVER['SERVER_PORT']	80
$_SERVER['REMOTE_ADDR']	192.168.70.96
$_SERVER['DOCUMENT_ROOT']	/var/www/html
$_SERVER['REQUEST_SCHEME']	http
$_SERVER['CONTEXT_PREFIX']	no value
$_SERVER['CONTEXT_DOCUMENT_ROOT']	/var/www/html
$_SERVER['SERVER_ADMIN']	webmaster@localhost
$_SERVER['SCRIPT_FILENAME']	/var/www/html/info.php
$_SERVER['REMOTE_PORT']	56538
$_SERVER['GATEWAY_INTERFACE']	CGI/1.1
$_SERVER['SERVER_PROTOCOL']	HTTP/1.1
$_SERVER['REQUEST_METHOD']	GET
$_SERVER['QUERY_STRING']	no value
$_SERVER['REQUEST_URI']	/info.php
$_SERVER['SCRIPT_NAME']	/info.php
$_SERVER['PHP_SELF']	/info.php
$_SERVER['REQUEST_TIME_FLOAT']	1695883702.0609
$_SERVER['REQUEST_TIME']	1695883702

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MySQL driver for PDO	George Schlossnagle, Wez Furlong, Ilia Alshanetsky, Johannes Schlueter
MySQLi	Zak Greant, Georg Richter, Andrey Hristov, Ulf Wendel
MySQLnd	Andrey Hristov, Ulf Wendel, Georg Richter, Johannes Schlüter
OCI8	Stig Bakken, Thies C. Arntzen, Andy Sautins, David Benson, Maxim Maletsky, Harald Radi, Antony Dovgal, Andi Gutmans, Wez Furlong, Christopher Jones, Oracle Corporation
ODBC driver for PDO	Wez Furlong
ODBC	Stig Bakken, Andreas Karajannis, Frank M. Kromann, Daniel R. Kalowsky
Opcache	Andi Gutmans, Zeev Suraski, Stanislav Malyshev, Dmitry Stogov, Xinchen Hui
OpenSSL	Stig Venaas, Wez Furlong, Sascha Kettler, Scott MacVicar, Eliot Lear
Oracle (OCI) driver for PDO	Wez Furlong
pcntl	Jason Greene, Arnaud Le Blanc
Perl Compatible Regexps	Andrei Zmievski
PHP Archive	Gregory Beaver, Marcus Boerger
PHP Data Objects	Wez Furlong, Marcus Boerger, Sterling Hughes, George Schlossnagle, Ilia Alshanetsky
PHP hash	Sara Golemon, Rasmus Lerdorf, Stefan Esser, Michael Wallner, Scott MacVicar
Posix	Kristian Koehntopp
PostgreSQL driver for PDO	Edin Kadribasic, Ilia Alshanetsky
PostgreSQL	Jouni Ahto, Zeev Suraski, Yasuo Ohgaki, Chris Kings-Lynne
Pspell	Vlad Krupin
Readline	Thies C. Arntzen
Reflection	Marcus Boerger, Timm Friebe, George Schlossnagle, Andrei Zmievski, Johannes Schlueter
Sessions	Sascha Schumann, Andrei Zmievski
Shared Memory Operations	Slava Poliakov, Ilia Alshanetsky
SimpleXML	Sterling Hughes, Marcus Boerger, Rob Richards
SNMP	Rasmus Lerdorf, Harrie Hazewinkel, Mike Jackson, Steven Lawrance, Johann Hanne, Boris Lytochkin
SOAP	Brad Lafountain, Shane Caraveo, Dmitry Stogov
Sockets	Chris Vandomelen, Sterling Hughes, Daniel Beulshausen, Jason Greene
Sodium	Frank Denis
SPL	Marcus Boerger, Etienne Kneuss
SQLite 3.x driver for PDO	Wez Furlong
SQLite3	Scott MacVicar, Ilia Alshanetsky, Brad Dewar
System V Message based IPC	Wez Furlong
System V Semaphores	Tom May
System V Shared Memory	Christian Cartus
tidy	John Coggeshall, Ilia Alshanetsky
tokenizer	Andrei Zmievski, Johannes Schlueter
XML	Stig Bakken, Thies C. Arntzen, Sterling Hughes
XMLReader	Rob Richards
XMLWriter	Rob Richards, Pierre-Alain Joye
XSL	Christian Stocker, Rob Richards
Zip	Pierre-Alain Joye, Remi Collet
Zlib	Rasmus Lerdorf, Stefan Roehrich, Zeev Suraski, Jade Nicoletti, Michael Wallner

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Paso 10:

Instalamos phpadmin siguiendo los pasos y accedemos a el desde la dirección ip mas /phpmyadmin
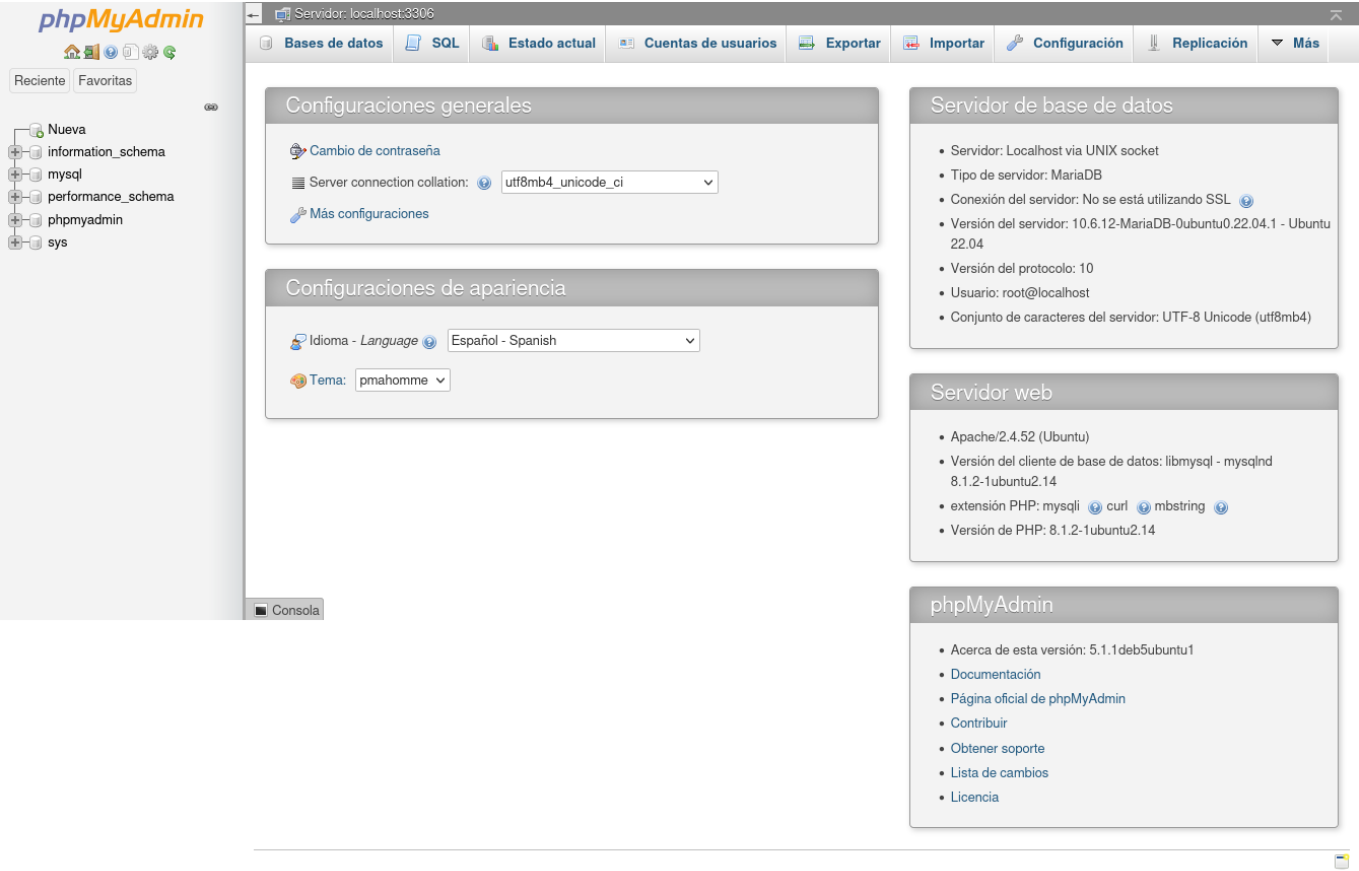
Paso 11:

Cambiamos el puerto del 80 al 81 para probar los puertos.

```
  GNU nano 6.2                            ports.conf *
# If you just change the port or add more ports here, you will likely also
# have to change the VirtualHost statement in
# /etc/apache2/sites-enabled/000-default.conf

Listen 81_

<IfModule ssl_module>
        Listen 443                              26 / 26
</IfModule>

<IfModule mod_gnutls.c>
        Listen 443
</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet




















                                    [ Read 15 lines ]
^G Help       ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo
^X Exit       ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line M-E Redo
```