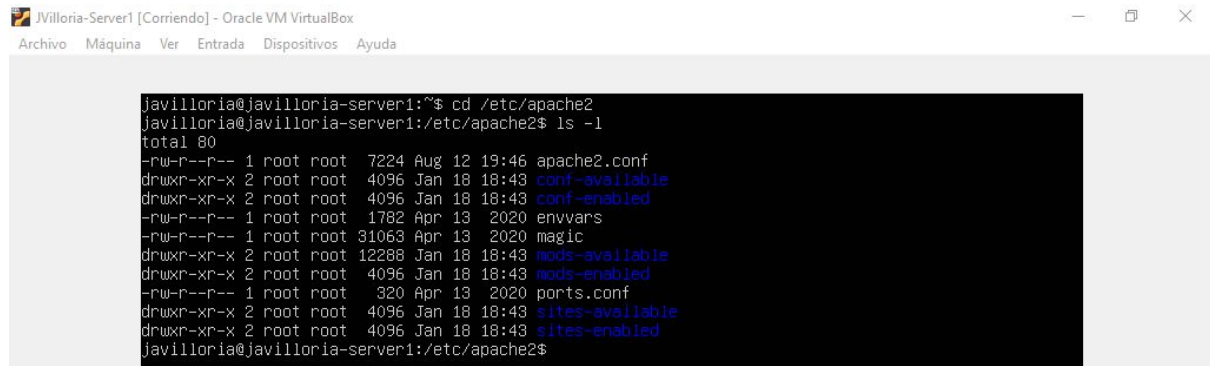


JUAN ANTONIO VILLORIA DEL MORAL

Actividad 1 – Ficheros de configuración

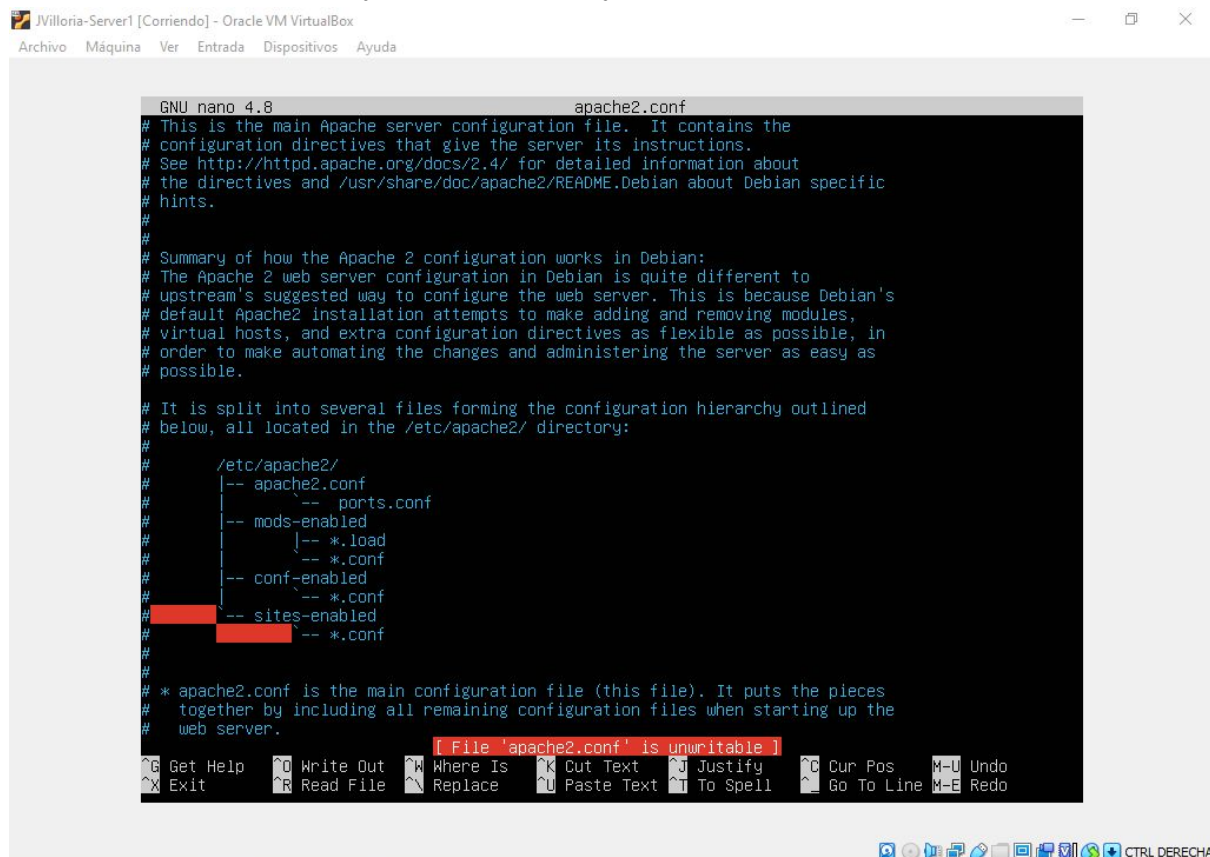
1. Inicia sesión en “Alias-Server”
2. Abre un terminal y accede al directorio /etc/apache2
3. Haz un listado largo del directorio y observa los ficheros de configuración (captura de pantalla)



```
Jvilloria-Server1 [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

javilloria@javilloria-server1:~$ cd /etc/apache2
javilloria@javilloria-server1:/etc/apache2$ ls -l
total 80
-rw-r--r-- 1 root root 7224 Aug 12 19:46 apache2.conf
drwxr-xr-x 2 root root 4096 Jan 18 18:43 conf-available
drwxr-xr-x 2 root root 4096 Jan 18 18:43 conf-enabled
-rw-r--r-- 1 root root 1782 Apr 13 2020 envvars
-rw-r--r-- 1 root root 31063 Apr 13 2020 magic
drwxr-xr-x 2 root root 12288 Jan 18 18:43 mods-available
drwxr-xr-x 2 root root 4096 Jan 18 18:43 mods-enabled
-rw-r--r-- 1 root root 320 Apr 13 2020 ports.conf
drwxr-xr-x 2 root root 4096 Jan 18 18:43 sites-available
drwxr-xr-x 2 root root 4096 Jan 18 18:43 sites-enabled
javilloria@javilloria-server1:/etc/apache2$
```

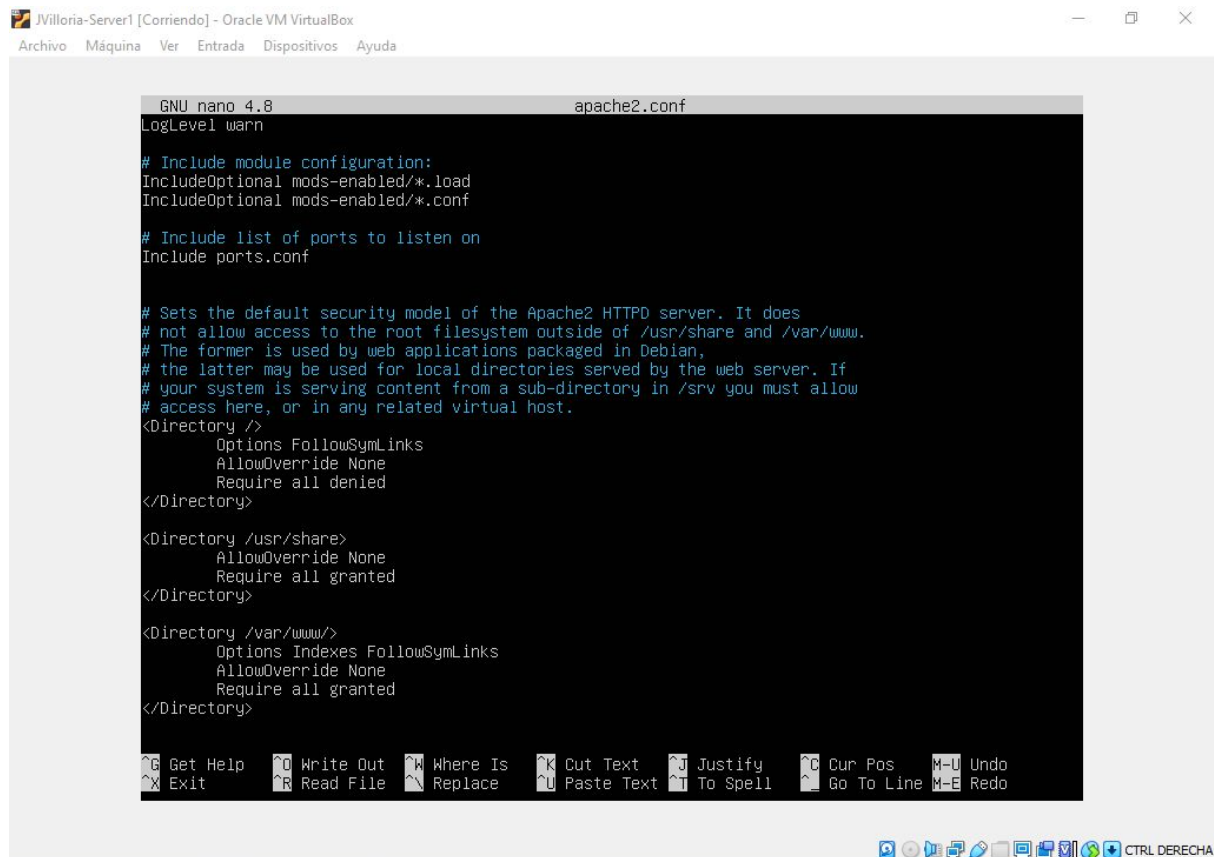
4. Abre el fichero /etc/apache2/apache2.conf y analiza su configuración. Observa que, con la directiva include, se incluyen otros ficheros y directorios, (captura de pantalla).



```
Jvilloria-Server1 [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

GNU nano 4.8                                apache2.conf
# This is the main Apache server configuration file. It contains the
# configuration directives that give the server its instructions.
# See http://httpd.apache.org/docs/2.4/ for detailed information about
# the directives and /usr/share/doc/apache2/README.Debian about Debian specific
# hints.
#
# Summary of how the Apache 2 configuration works in Debian:
# The Apache 2 web server configuration in Debian is quite different to
# upstream's suggested way to configure the web server. This is because Debian's
# default Apache2 installation attempts to make adding and removing modules,
# virtual hosts, and extra configuration directives as flexible as possible, in
# order to make automating the changes and administering the server as easy as
# possible.
#
# It is split into several files forming the configuration hierarchy outlined
# below, all located in the /etc/apache2/ directory:
#
#      /etc/apache2/
#      |-- apache2.conf
#      |-- ports.conf
#      |-- mods-enabled
#          |-- *.load
#          |-- *.conf
#      |-- conf-enabled
#          |-- *.conf
#      |-- sites-enabled
#          |-- *.conf
#
# * apache2.conf is the main configuration file (this file). It puts the pieces
# together by including all remaining configuration files when starting up the
# web server.
[ File 'apache2.conf' is unwritable ]
^G Get Help  ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos    M-U Undo
^X Exit      ^R Read File  ^M Replace    ^U Paste Text ^T To Spell   ^_ Go To Line   M-E Redo

CTRL DERECHA
```



```
GNU nano 4.8 apache2.conf
LogLevel warn

# Include module configuration:
IncludeOptional mods-enabled/*.load
IncludeOptional mods-enabled/*.conf

# Include list of ports to listen on
Include ports.conf

# Sets the default security model of the Apache2 HTTPD server. It does
# not allow access to the root filesystem outside of /usr/share and /var/www.
# The former is used by web applications packaged in Debian,
# the latter may be used for local directories served by the web server. If
# your system is serving content from a sub-directory in /srv you must allow
# access here, or in any related virtual host.
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Require all denied
</Directory>

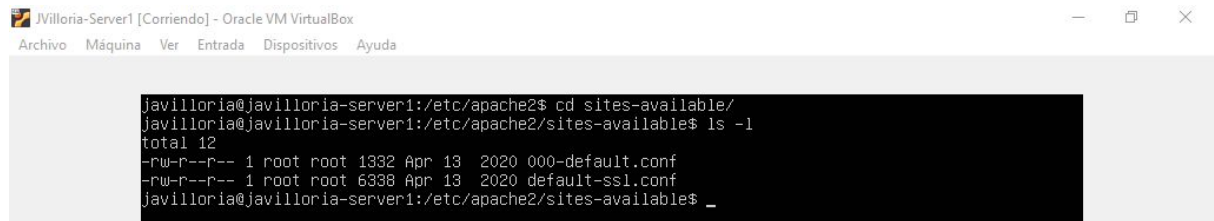
<Directory /usr/share>
    AllowOverride None
    Require all granted
</Directory>

<Directory /var/www/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

Get Help  Write Out  Where Is  Cut Text  Justify  Cur Pos  M-U Undo
Exit      Read File  Replace  Paste Text  To Spell  Go To Line  M-E Redo
```

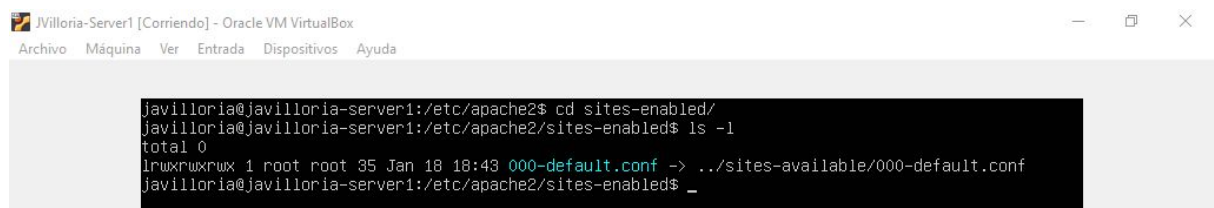
Actividad 2 – Servidor Virtual por defecto

1. Accede al directorio `/etc/apache2/sites-available` y comprueba que esta creado el archivo `000-default.conf` que contiene la configuración virtual por defecto (captura de pantalla).



```
Jvilloria@jvilloria-server1:/etc/apache2$ cd sites-available/
Jvilloria@jvilloria-server1:/etc/apache2/sites-available$ ls -l
total 12
-rw-r--r-- 1 root root 1332 Apr 13 2020 000-default.conf
-rw-r--r-- 1 root root 6338 Apr 13 2020 default-ssl.conf
Jvilloria@jvilloria-server1:/etc/apache2/sites-available$ _
```

2. Accede al directorio `/etc/apache2/sites-enabled` y comprueba que existe el fichero `000-default.conf` que es un enlace simbólico a default (captura) (captura de pantalla).



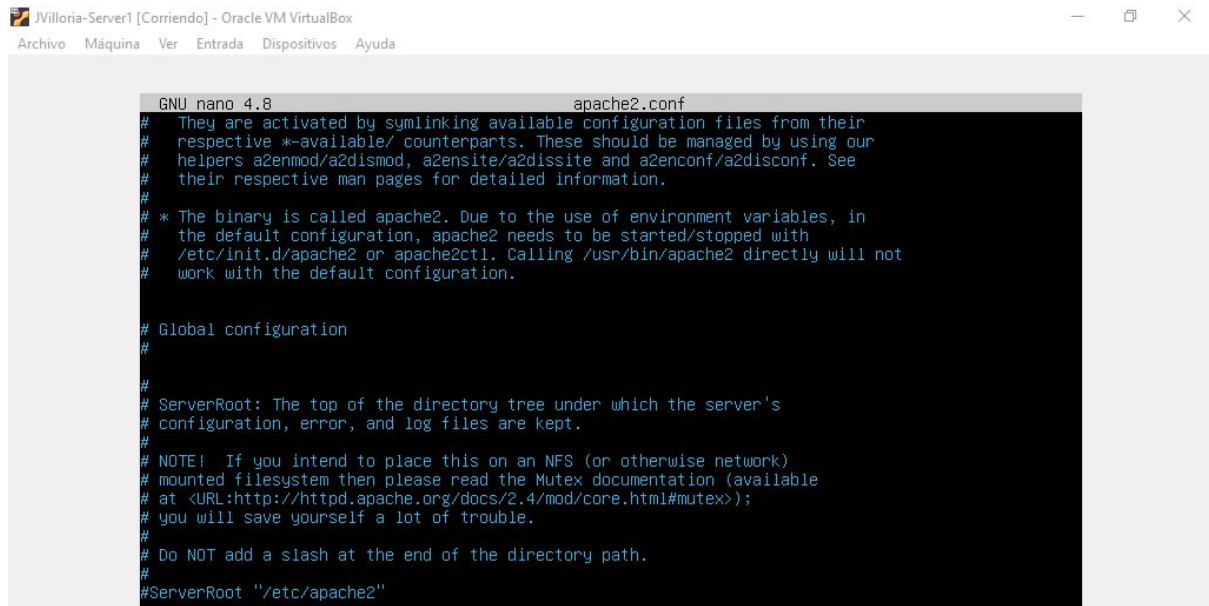
```
Jvilloria@jvilloria-server1:/etc/apache2$ cd sites-enabled/
Jvilloria@jvilloria-server1:/etc/apache2/sites-enabled$ ls -l
total 0
lrwxrwxrwx 1 root root 35 Jan 18 18:43 000-default.conf -> ../sites-available/000-default.conf
Jvilloria@jvilloria-server1:/etc/apache2/sites-enabled$ _
```

Actividad 3 – Directivas

1. Accede al fichero `/etc/apache2/apache2.conf` y comprueba cuál es el valor de las siguientes directivas.

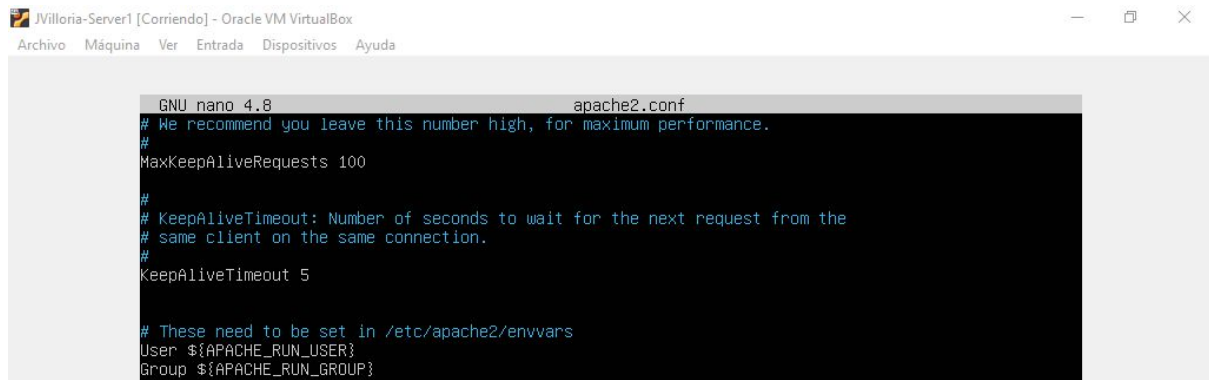
ATENCIÓN: Quizás tengas que hacer alguna operación para averiguar el valor real de dichas directivas, ya que pueden ser variables.

ServerRoot



```
GNU nano 4.8 apache2.conf
# 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. Due to the use of environment variables, in
# the default configuration, apache2 needs to be started/stopped with
# /etc/init.d/apache2 or apache2ctl. Calling /usr/bin/apache2 directly will not
# work with the default configuration.
#
# Global configuration
#
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# NOTE! If you intend to place this on an NFS (or otherwise network)
# mounted filesystem then please read the Mutex documentation (available
# at <URL:http://httpd.apache.org/docs/2.4/mod/core.html#mutex>);
# you will save yourself a lot of trouble.
#
# Do NOT add a slash at the end of the directory path.
#
#ServerRoot "/etc/apache2"
```

User y Group



```
GNU nano 4.8 apache2.conf
# We recommend you leave this number high, for maximum performance.
#
MaxKeepAliveRequests 100
#
# KeepAliveTimeout: Number of seconds to wait for the next request from the
# same client on the same connection.
#
KeepAliveTimeout 5
#
# These need to be set in /etc/apache2/envvars
User ${APACHE_RUN_USER}
Group ${APACHE_RUN_GROUP}
```

TimeOut

```
GNU nano 4.8                                apache2.conf
#
# The accept serialization lock file MUST BE STORED ON A LOCAL DISK.
#
#Mutex file:${APACHE_LOCK_DIR} default
#
# The directory where shm and other runtime files will be stored.
#

DefaultRuntimeDir ${APACHE_RUN_DIR}

#
# PidFile: The file in which the server should record its process
# identification number when it starts.
# This needs to be set in /etc/apache2/envvars
#
PidFile ${APACHE_PID_FILE}

#
# Timeout: The number of seconds before receives and sends time out.
#
Timeout 300
```

2. Consulta la documentación de apache y responde a las siguientes preguntas:

- ¿Se permite conexiones persistentes (que todas las conexiones de un usuario se atienden en la misma conexión TCP)? ¿Qué directiva define este comportamiento?
Si se permite a través de la directiva KeepAlive.
- ¿Cuál es el fichero de errores? ¿Qué directiva lo define?
Carpeta logs a través de la directiva ErrorLog.

3. Consulta el fichero /etc/apache2/ports.conf y comprueba cual es el puerto en el que escucha peticiones Apache (captura de pantalla).

```
GNU nano 4.8                                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 80

<IfModule ssl_module>
    Listen 443
</IfModule>

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

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

¿En qué puerto escuchara también si se habilita el módulo modssl?. (captura de pantalla)

```
<IfModule ssl_module>
    Listen 443
</IfModule>
```

4. Consulta el fichero /etc/apache2/sites-available/000.default.conf

- Dentro de la directiva <virtualHost>...</VirtualHost> se define el comportamiento del servidor virtual por defecto

JVilloria-Server1 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

```
GNU nano 4.8                                000-default.conf
<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

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

^G Get Help      ^O Write Out    ^W Where Is     ^K Cut Text     ^J Justify      ^C Cur Pos      M-U Undo
^X Exit          ^R Read File    ^_ Replace      ^U Paste Text   ^T To Spell     ^_ Go To Line    M-E Redo
```

CTRL DERECHA

· El valor de la directiva DocumentRoot es: _____

```
ServerAdmin webmaster@localhost
DocumentRoot /var/www/html
```

· El valor de la directiva errorlog es: _____

```
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
```

5. Consulta el fichero /etc/apache2/apache.conf

· La directiva contenedora <directory>...</directory> que se utiliza para determinar cómo apache sirve el contenido del directorio /var/www (captura de pantalla)

```
GNU nano 4.8                                apache2.conf

# Sets the default security model of the Apache2 HTTPD server. It does
# not allow access to the root filesystem outside of /usr/share and /var/www.
# The former is used by web applications packaged in Debian,
# the latter may be used for local directories served by the web server. If
# your system is serving content from a sub-directory in /srv you must allow
# access here, or in any related virtual host.
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Require all denied
</Directory>

<Directory /usr/share>
    AllowOverride None
    Require all granted
</Directory>

<Directory /var/www/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

#<Directory /srv/>
#     Options Indexes FollowSymLinks
#     AllowOverride None
#     Require all granted
#</Directory>

_
_

_ G Get Help      _ O Write Out    _ W Where Is    _ K Cut Text    _ J Justify    _ C Cur Pos    M-U Undo
_ X Exit          _ R Read File    _ _ Replace    _ U Paste Text _ T To Spell    _ _ Go To Line M-E Redo
```