

SISTEMAS DE GESTIÓN EMPRESARIAL

UNIDAD 1. INTRODUCCIÓN A DOCKER.

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Parte 3. Caso práctico 2. Instalando LAMP + Wordpress en un contenedor.

Preparando el contenedor:

```
esther@DESKTOP-TF5UUC2:~$ docker run -it -p 8080:80 --name LAMP ubuntu /bin/bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
35807b77a593: Pull complete
Digest: sha256:9d6a8699fb5c9c39cf08a0871bd6219f0400981c570894cd8cbea30d3424a31f
Status: Downloaded newer image for ubuntu:latest
root@9599f089553d:/#
```

Actualizamos la lista de paquetes e instalamos los necesarios para LAMP y Wordpress:

```
root@9599f089553d: /
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
35807b77a593: Pull complete
Digest: sha256:9d6a8699fb5c9c39cf08a0871bd6219f0400981c570894cd8cbea30d3424a31f
Status: Downloaded newer image for ubuntu:latest
root@9599f089553d:/# apt update
Get:1 http://archive.ubuntu.com/ubuntu focal InRelease [265 kB]
Get:2 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal/universe amd64 Packages [11.3 MB]
Get:6 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [30.1 kB]
Get:7 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [529 kB]
Get:8 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [791 kB]
Get:9 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1082 kB]
Get:10 http://archive.ubuntu.com/ubuntu focal/restricted amd64 Packages [33.4 kB]
Get:11 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages [1275 kB]
Get:12 http://archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [177 kB]
Get:13 http://archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1071 kB]
Get:14 http://archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [33.3 kB]
Get:15 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1528 kB]
Get:16 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [576 kB]
Get:17 http://archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [6310 B]
Get:18 http://archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [2668 B]
Fetched 19.1 MB in 11s (1669 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
3 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@9599f089553d:/#
root@9599f089553d: /
-network-sk_SK.mo admin-network-sl_SI.mo admin-network-sq.mo admin-network-sr_RS.mo admin-network-sv_SE.mo admin-network-
-ug_CN.mo admin-network-zh_CN.mo admin-network-zh_TW.mo admin-ru_RU.mo admin-sk_SK.mo admin-sl_SI.mo admin-sq.mo admin-s
r_RS.mo admin-sv_SE.mo admin-ug_CN.mo admin-zh_CN.mo admin-zh_TW.mo ar.mo bg_BG.mo bn_BD.mo bs_BA.mo ca.mo ckb.mo contin
ents-cities-bg_BG.mo continents-cities-bs_BA.mo continents-cities-cs_CZ.mo continents-cities-cy.mo continents-cities-da
DK.mo continents-cities-de_DE.mo continents-cities-el.mo continents-cities-en_CA.mo continents-cities-es_ES.mo continent
s-cities-et.mo continents-cities-eu.mo continents-cities-fa_IR.mo continents-cities-fi.mo continents-cities-fr_FR.mo con
tinent-cities-gd.mo continents-cities-he_IL.mo continents-cities-hr.mo continents-cities-hu_HU.mo continents-cities-it
IT.mo continents-cities-ja.mo continents-cities-ka_GE.mo continents-cities-ko_KR.mo continents-cities-lv.mo continents-c
ities-mk_MK.mo continents-cities-my_MM.mo continents-cities-nb_NO.mo continents-cities-nn_NO.mo continents-cities-pl_PL
.mo continents-cities-pt_PT.mo continents-cities-pt_PT.mo continents-cities-ro_RO.mo continents-cities-ru_RU.mo continent
s-cities-sk_SK.mo continents-cities-sl_SI.mo continents-cities-sq.mo continents-cities-sr_RS.mo continents-cities-su_ID
.mo continents-cities-sv_SE.mo continents-cities-ta_LK.mo continents-cities-tr_TR.mo continents-cities-ug_CN.mo continent
s-cities-vi.mo continents-cities-zh_CN.mo continents-cities-zh_TW.mo cs_CZ.mo cy.mo da_DK.mo de_DE.mo el.mo en_CA.mo eo
mo es_CL.mo es_ES.mo es_ES.mo es_PE.mo et.mo eu.mo fa_IR.mo fi.mo fr_FR.mo gd.mo gl_ES.mo he_IL.mo hr.mo hu_HU.mo id_ID.mo it_IT
.mo ja.mo jv_ID.mo ka_GE.mo ko_KR.mo lv.mo mk_MK.mo ms_MY.mo my_MM.mo nb_NO.mo nl.mo nl_NL.mo pl_PL.mo pt_BR.mo pt_PT.mo
ro_RO.mo ru_RU.mo ru-UA.mo si_LK.mo sk_SK.mo sl_SI.mo sq.mo sr_RS.mo su_ID.mo sv_SE.mo sw.mo ta_LK.mo th.mo tr_TR.mo ug
_CN.mo uk.mo ur.mo vi.mo zh_CN.mo zh_HK.mo zh_TW.mo
Setting up php (7.4+75) ...
Setting up wordpress-l10n (5.3.2+dfsg1-1ubuntu1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
Processing triggers for ca-certificates (20210119~20.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
Processing triggers for php7.4-cli (7.4.3-4ubuntu2.6) ...
Processing triggers for libapache2-mod-php7.4 (7.4.3-4ubuntu2.6) ...
root@9599f089553d:/#
```

Lanzamos el servicio Apache:

```
root@9599f089553d:/# service apache2 start
* Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message
*
root@9599f089553d:/#
```

Creamos el fichero wordpress.conf:

```
root@9599f089553d:/etc/apache2/sites-available

root@9599f089553d:/# ls etc/apache2/sites-available
000-default.conf default-ssl.conf
root@9599f089553d:/# cd etc
root@9599f089553d:/etc# cd apache2
root@9599f089553d:/etc/apache2# cd sites-available
root@9599f089553d:/etc/apache2/sites-available# nano
root@9599f089553d:/etc/apache2/sites-available# ls
000-default.conf default-ssl.conf wordpress.conf
root@9599f089553d:/etc/apache2/sites-available#
```

Preparamos el servicio SQL:

```
root@DESKTOP-TF5UUC2:/etc/apache2/sites-available

anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.

Remove test database and access to it? (Press y|Y for Yes, any other key for No) : y
- Dropping test database...
Success.

- Removing privileges on test database...
Success.

Reloading the privilege tables will ensure that all changes
made so far will take effect immediately.

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
Success.

All done!
root@DESKTOP-TF5UUC2:/etc/apache2/sites-available# _
```

```
root@DESKTOP-TF5UUC2: /etc/apache2/sites-available

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> CREATE DATABASE wordpress;
ERROR 1007 (HY000): Can't create database 'wordpress'; database exists
mysql> CREATE USER 'wordpress'@'%' IDENTIFIED BY 'MiPass-2021';
Query OK, 0 rows affected (0.03 sec)

mysql> GRANT ALL PRIVILEGES ON wordpress.* TO 'wordpress'@'%' WITH GRANT OPTION;
Query OK, 0 rows affected (0.02 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.02 sec)

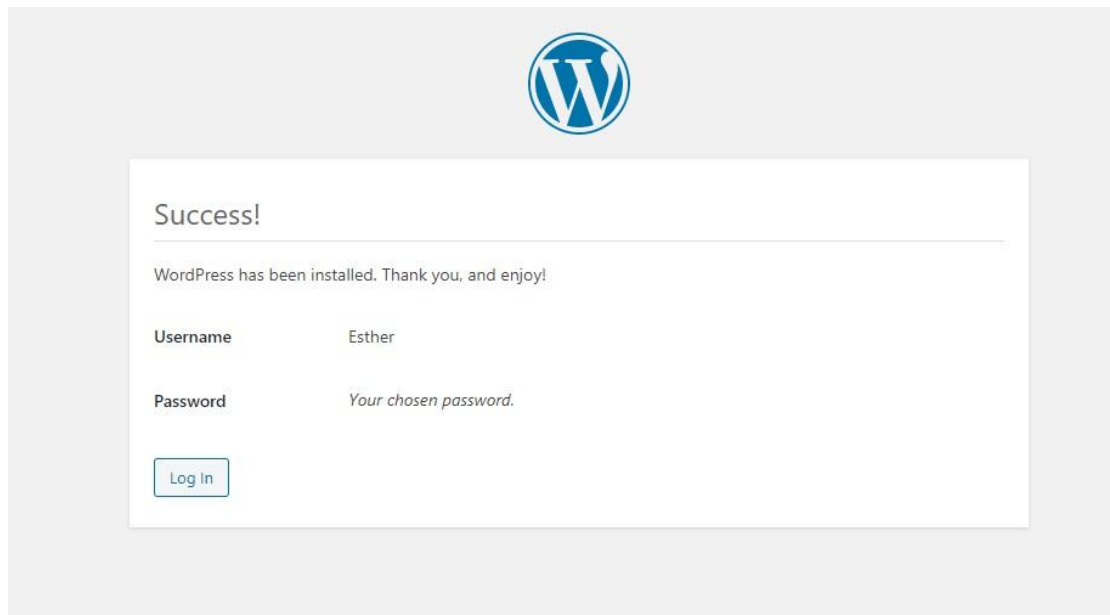
mysql> _
```

Editamos el fichero de texto de configuración de Wordpress:

```
root@DESKTOP-TF5UUC2: /etc/wordpress
GNU nano 4.8 config-localhost.php Modified
?php
define('DB_NAME', 'wordpress');
define('DB_USER', 'wordpress');
define('DB_PASSWORD', 'MiPass-2021');
define('DB_HOST', 'localhost');
define('DB_COLLATE', 'utf8_general_ci');
define('WP_CONTENT_DIR', '/usr/share/wordpress/wp-content');
?>
_

^G Get Help  ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos    M-U Undo      M-A Mark Text
^X Exit      ^R Read File  ^\ Replace   ^U Paste Text ^T To Spell   ^_ Go To Line  M-E Redo      M-6 Copy Text
```

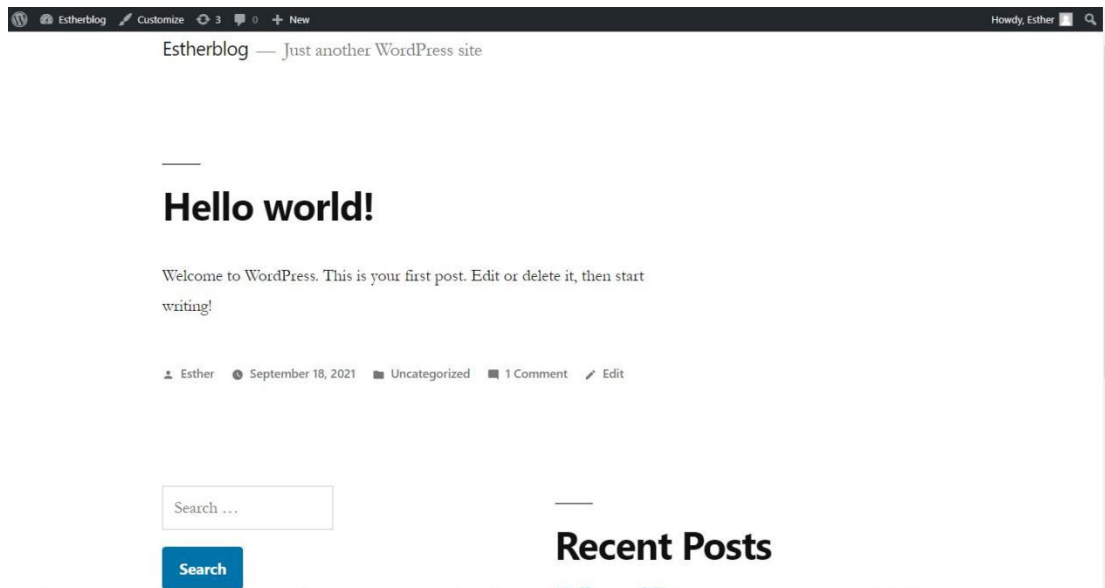
Configuramos nuestro sitio Wordpress:



Modificamos el archivo .bashrc:

```
root@DESKTOP-TF5UUC2: ~
GNU nano 4.8 .bashrc Modified
alias fgrep='fgrep --color=auto'
alias egrep='egrep --color=auto'
fi
# some more ls aliases
alias ll='ls -alf'
alias la='ls -A'
alias l='ls -CF'
# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.
if [ -f ~/.bash_aliases ]; then
fi
. ~/.bash_aliases
fi
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
# if [ -f /etc/bash_completion ] && ! shopt -oq posix; then
# . /etc/bash_completion
#fi
service apache2 start
service mysql start_
```

Comprobamos que todo haya funcionado correctamente:

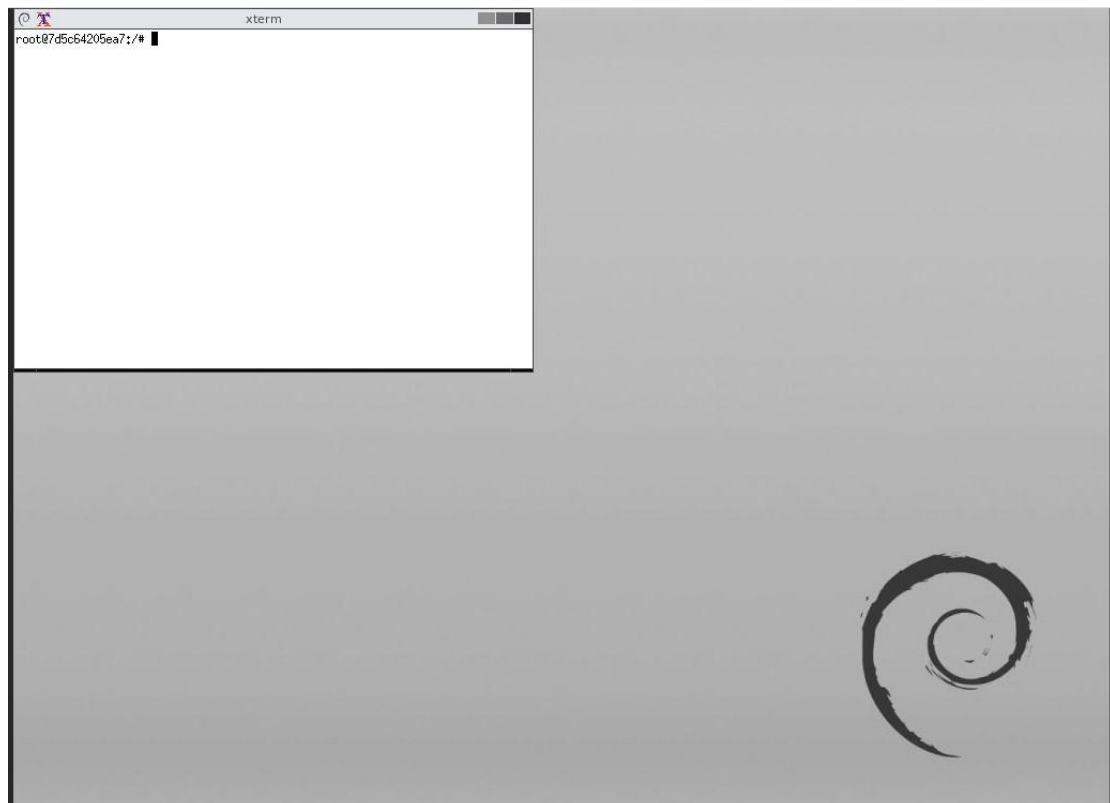


Parte 3. Caso práctico 3. Accediendo a interfaz gráfica con NoVNC.

Creamos el contenedor:

```
esther@DESKTOP-TF5UUC2: ~  
esther@DESKTOP-TF5UUC2:~$ docker run --rm -it -p 8080:8080 theasp/novnc  
Unable to find image 'theasp/novnc:latest' locally  
latest: Pulling from theasp/novnc  
6c33745f49b4: Pull complete  
0151b536048f: Downloading [=====>] 98.58MB/164MB  
1da4ef8ba156: Download complete  
-
```

Al abrir la url vemos esto:



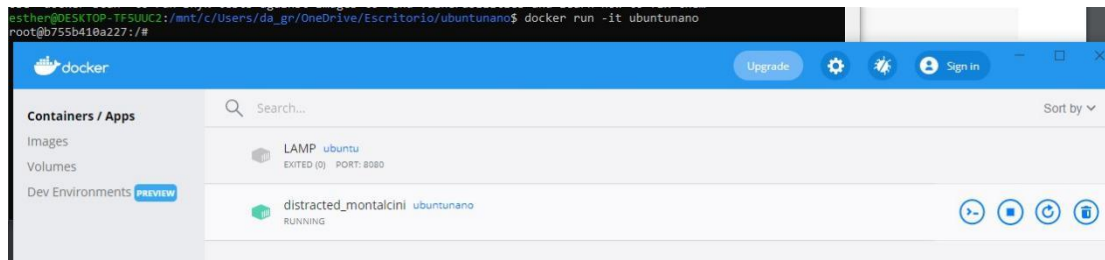
Parte 4. Caso práctico 1. Creando imagen Ubuntu con nano.

Una vez preparado el fichero Dockerfile, creamos la imagen:

```
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/ubuntuano
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio$ cd ubuntuano
[+] Building 15.8s (6/6) FINISHED
=> [internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 393B 0.0s
=> [internal] load .dockerignore 0.1s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/ubuntu:latest 0.0s
=> [1/2] FROM docker.io/library/ubuntu 0.1s
=> [2/2] RUN apt update && apt install -y nano && apt purge --auto-remove && apt clean && rm -rf /var/lib/apt/l 15.3s
=> exporting to image 0.2s
=> => exporting layers 0.2s
=> => writing image sha256:2b756a1e294b545bf69def9f90cbe44ae2ec982ffbb1503444e6f8f2248b407f 0.0s
=> => naming to docker.io/library/ubuntuano 0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/ubuntuano$
```

Comprobamos que se ha creado correctamente:



Parte 4. Caso práctico 2. Creando imagen con APP ejemplo Docker en Node.

Creamos la imagen:

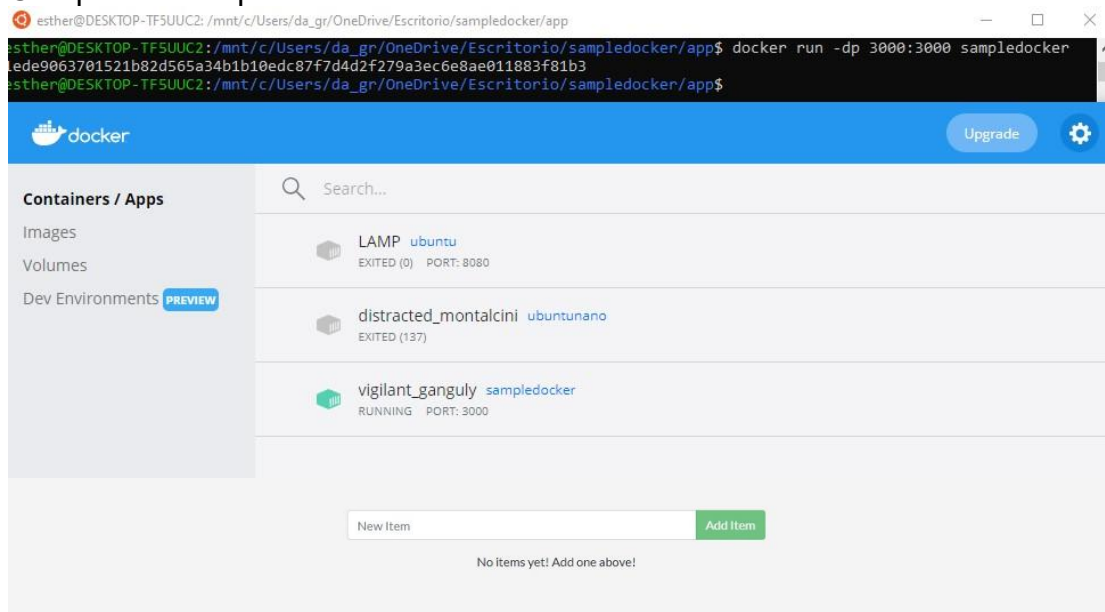
```

esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/sampleddocker/app$ docker build -t sampleddocker ./
[+] Building 36.1s (9/9) FINISHED
=> [internal] load build definition from Dockerfile                                0.1s
=> => transferring dockerfile: 428B                                              0.0s
=> [internal] load .dockerignore                                                  0.1s
=> => transferring context: 2B                                                    0.0s
=> [internal] load metadata for docker.io/library/node:12-alpine                13.7s
=> [1/4] FROM docker.io/library/node:12-alpine@sha256:1ea5900145028957ec0e7b7e590ac677797fa8962ccce4e73188092f7b  5.8s
=> resolve docker.io/library/node:12-alpine@sha256:1ea5900145028957ec0e7b7e590ac677797fa8962ccce4e73188092f7b  0.0s
=> sha256:1ea5900145028957ec0e7b7e590ac677797fa8962ccce4e73188092f7b14da5 1.43kB / 1.43kB
=> sha256:125db6f2d61b01b0740ce4de1ffdbca3c40664db57b348b88a6d87e70d46abd6 1.16kB / 1.16kB
=> sha256:b30595aabe5318da9f18acff21c79aa1caedbd0314fa4028f0dd6a4801e988ad0 6.53kB / 6.53kB
=> sha256:6a428f9f83b0a29f1fdd2ccccca19a9bab805a925b8eddf432a5a3d3da04afbc 2.82MB / 2.82MB
=> sha256:8a7ab7725978320093e26b86ae395a5b6e50ab2d4888b9e2a6c2ffd447598da8 2.24MB / 2.24MB
=> sha256:d0fe2b74aff960282c3c01d80bbb5b45a12e84f7e2ad3b65daac8f42351d5a6 24.62MB / 24.62MB
=> extracting sha256:6a428f9f83b0a29f1fdd2ccccca19a9bab805a925b8eddf432a5a3d3da04afbc 0.1s
=> extracting sha256:f1c9d3375a027db46ec3b2edda79e800652d66b831df7e740c719db600dbaf0 283B / 283B
=> extracting sha256:d0fe2b74aff960282c3c01d80bbb5b45a12e84f7e2ad3b65daac8f42351d5a6 1.1s
=> extracting sha256:8a7ab7725978320093e26b86ae395a5b6e50ab2d4888b9e2a6c2ffd447598da8 0.2s
=> extracting sha256:f1c9d3375a027db46ec3b2edda79e800652d66b831df7e740c719db600dbaf0 0.0s
=> [internal] load build context                                                  0.3s
=> => transferring context: 4.63MB                                              0.2s
=> [2/4] WORKDIR /app                                                            0.4s
=> [3/4] COPY . .                                                                0.2s
=> [4/4] RUN yarn install --production                                          14.4s
=> exporting to image                                                            1.3s
=> => exporting layers                                                          1.2s
=> writing image sha256:0bbd414a5d9411ddda54fa9ed41a05fbd9f226fc8ad3723a96e4009b243ae1bd 0.0s
=> naming to docker.io/library/sampleddocker                                   0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/sampleddocker/app$

```

Comprobamos que ha funcionado:



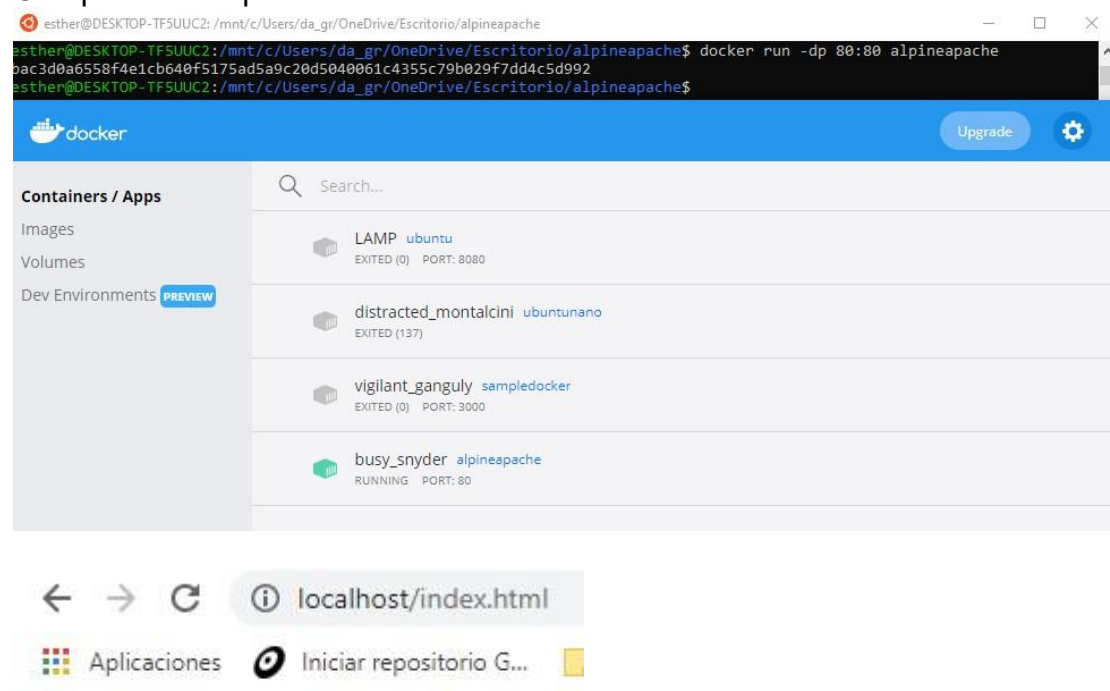
Parte 4. Caso práctico 3. Apache 2 con PHP desde Alpine.

Creamos la imagen:

```
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/alpineapache$ docker build -t alpineapache ./
[+] Building 11.6s (12/12) FINISHED
=> [internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 1.45kB 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/alpine:latest 3.8s
=> [internal] load build context 0.1s
=> => transferring context: 117B 0.0s
=> [1/6] FROM docker.io/library/alpine@sha256:e1c082e3d3c45cccac829840a25941e679c25d438cc8412c2fa221cf1a824e6a 0.8s
=> => resolve docker.io/library/alpine@sha256:e1c082e3d3c45cccac829840a25941e679c25d438cc8412c2fa221cf1a824e6a 0.8s
=> => sha256:e1c082e3d3c45cccac829840a25941e679c25d438cc8412c2fa221cf1a824e6a 1.64kB / 1.64kB 0.0s
=> => sha256:69704ef328d05a9f806b6b8502915e6a0a4faa4d72018dc42343f511490daf8a 528B / 528B 0.0s
=> => sha256:14119a10abf4669e8cddbff324a9f9605d99697215a0d21c360fe8d8fa8471bab 1.47kB / 1.47kB 0.0s
=> => sha256:a0d0a0d46f8b52473982a3c466318f47976757551a53ffc9074c9fa7035982e 2.81MB / 2.81MB 0.5s
=> => extracting sha256:a0d0a0d46f8b52473982a3c466318f47976757551a53ffc9074c9fa7035982e 0.1s
=> https://gist.githubusercontent.com/SyntaxC4/5648247/raw/94277156638f9c309f2e36e19bff378ba7364907/info.php 0.8s
=> [2/6] RUN apk update && apk add apache2 php php-apache2 openrc tar 4.2s
=> [3/6] ADD ./start.sh /start.sh 0.2s
=> [4/6] ADD https://gist.githubusercontent.com/SyntaxC4/5648247/raw/94277156638f9c309f2e36e19bff378ba7364907/in 0.2s
=> [5/6] RUN adduser -u 82 -D -S -G www-data www-data 0.7s
=> [6/6] RUN chown -R www-data:www-data /var/www/ && chmod -R 775 /var/www/ && chmod 755 /start.sh 0.9s
=> exporting to image 0.6s
=> => exporting layers 0.6s
=> => writing image sha256:8f33bc361999fa95b7f5c1acd23c6a7722d9dcb3237246c2b6a99d3e91794fd6 0.0s
=> => naming to docker.io/library/alpineapache 0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
esther@DESKTOP-TF5UUC2: /mnt/c/Users/da_gr/OneDrive/Escritorio/alpineapache$
```

Comprobamos que funcione:



It works!



Primero creamos la red que van a compartir los contenedores:

```
esther@DESKTOP-TF5UUC2:~$ docker network create redwp
4cd06d0a7153af3eee8d0fac7fdd536cee26619616c8a47777f5257807e008de
esther@DESKTOP-TF5UUC2:~$
```

```
esther@DESKTOP-TF5UUC2:~$ docker run --name nuestromysql --network redwp -v /home/sergi/mysqldata:/var/lib/mysql -e MYSQL_ROOT_PASSWORD=cefireroot -e MYSQL_USER=cefireuser -e MYSQL_PASSWORD=cefirepass -e MYSQL_DATABASE=cefiredb -d mysql:5.6
Unable to find image 'mysql:5.6' locally
5.6: Pulling from library/mysql
442547fc262c: Pull complete
2bf716144687: Pull complete
e8b3b16588b1: Pull complete
c89f7ee6da81: Pull complete
091490fb32f5: Pull complete
6eeb696bc30f: Pull complete
8a92263747b2: Pull complete
07097cad43f1: Pull complete
e09f00a44ec7: Pull complete
18f954e29df7: Pull complete
b46b7702c2b2: Pull complete
Digest: sha256:35aa66157963240633625d6490d940069a1311fd9c022bf32116cbf95b90b541
Status: Downloaded newer image for mysql:5.6
5d0d753ca8e41df025442e95044965cd4104dcb9c6aadcb83800752f59da117c
esther@DESKTOP-TF5UUC2:~$
```

```
esther@DESKTOP-TF5UUC2:~$ docker run --name nuestrowp --network redwp -p 8080:80 -d wordpress
Unable to find image 'wordpress:latest' locally
latest: Pulling from library/wordpress
f8416d8bac72: Pull complete
2259392b425a: Pull complete
cfb39fc3daf5: Pull complete
5c501de24ca4: Pull complete
ccf5f97ffc5c: Pull complete
a408db913f46: Pull complete
43600da0ccdc: Pull complete
55db4904bf5d: Pull complete
ab673d231350: Pull complete
341045b54845: Pull complete
9602a80d4b1d: Pull complete
030541c23d91: Pull complete
9f845a70c89d: Pull complete
3dd2d3411943: Pull complete
a32a7f3ec191: Pull complete
864d321b5301: Pull complete
4740a7290d89: Pull complete
9bf80f14cc3a: Pull complete
01605ae73ede: Pull complete
ca00a0f9ead6: Pull complete
720eba734fe9: Pull complete
Digest: sha256:d48292cbdd57311af9baeb4ae59cce015d57c2071c59f9576527488661adcd56
Status: Downloaded newer image for wordpress:latest
7f23fd063ed5dafc4062b18840d1f69fd9cadfb5ff18afa2af5b5da1149ff65b
esther@DESKTOP-TF5UUC2:~$
```

Instalamos y configuramos Wordpress:

← → ↻ ⓘ localhost:8080/wp-admin/setup-config.php

Aplicaciones


Iniciar repositorio G...

JAVA

PYTHON

DOCKER

ANDROID



English (New Zealand)

English (Canada)

Esperanto

Español de Perú

Español de Costa Rica

Español de Argentina

Español

Español de Colombia

Español de Uruguay

Español de Chile

Español de Puerto Rico

Español de Guatemala

Español de México

Español de Ecuador

Español de Venezuela

Eesti

Euskara

فارسی

فارسی (افغانستان)


Suomi

Français

Français du Canada

Français de Belgique

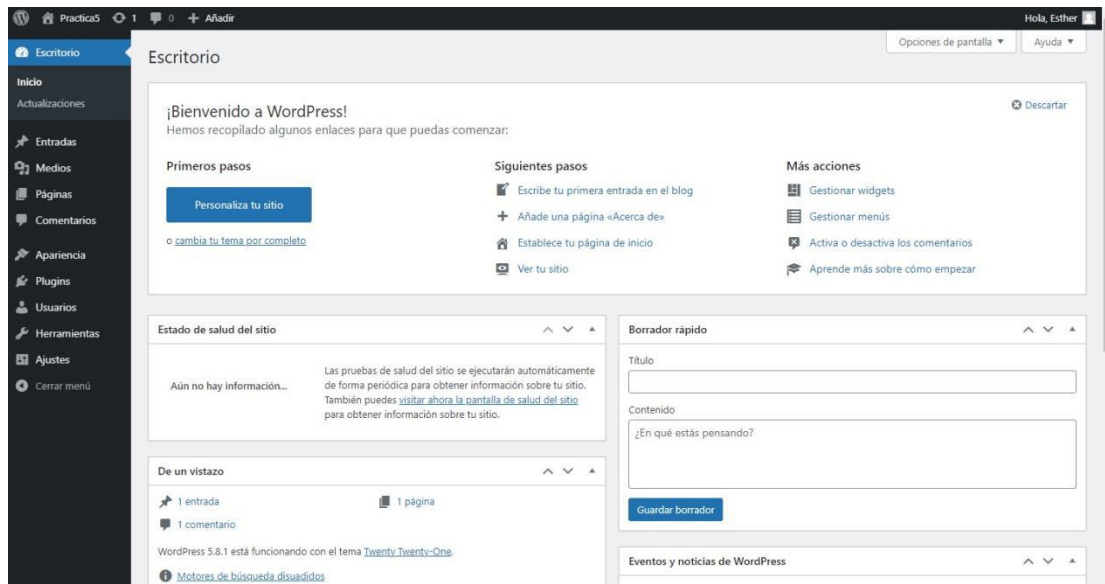
Continuar



A continuación debes introducir los detalles de conexión de tu base de datos. Si no estás seguro de esta información contacta con tu proveedor de alojamiento web.

Nombre de la base de datos	<input type="text" value="cefiredb"/>	El nombre de la base de datos que quieres usar con WordPress.
Nombre de usuario	<input type="text" value="cefireuser"/>	El nombre de usuario de tu base de datos.
Contraseña	<input type="password" value="cefirepass"/>	La contraseña de tu base de datos.
Servidor de la base de datos	<input type="text" value="nuestromysql"/>	Deberías recibir esta información de tu proveedor de alojamiento web, si localhost no funciona.
Prefijo de tabla	<input type="text" value="wp_"/>	Si quieres ejecutar varias instalaciones de WordPress en una sola base de datos cambia esto.

Enviar



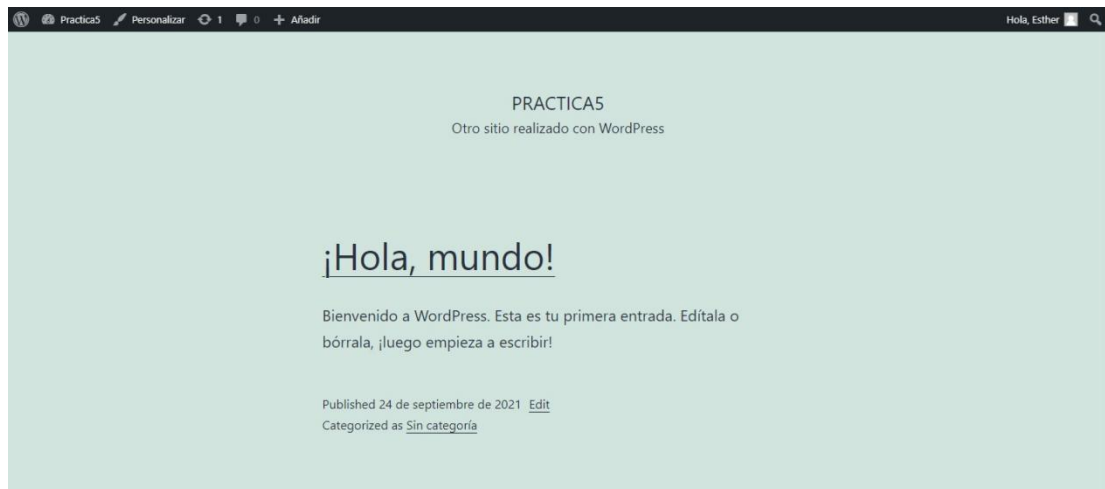
Y ahora migramos el contenedor MySQL de 5.6 a 5.7, para ello primero paramos y eliminamos el contenedor “nuestromysql”:

```
esther@DESKTOP-TF5UUC2:~$ docker stop nuestromysql
nuestromysql
esther@DESKTOP-TF5UUC2:~$ docker rm nuestromysql
nuestromysql
esther@DESKTOP-TF5UUC2:~$
```

Creamos el nuevo contenedor pasándole los datos que habíamos guardado previamente del otro:

```
esther@DESKTOP-TF5UUC2:~$ docker run --name nuestromysql --network redwp -v /home/sergi/mysqldata:/var/lib/mysql -d mysql:5.7
Unable to find image 'mysql:5.7' locally
5.7: Pulling from library/mysql
a330b6cecb98: Pull complete
9c8f656c32b8: Pull complete
88e473c3f553: Pull complete
062463ea5d2f: Pull complete
daf7e3bdf4b6: Pull complete
1839c0b7aac9: Pull complete
cf0a0cfee6d0: Pull complete
fae7a809788c: Pull complete
dae5a82a61f0: Pull complete
7063da9569eb: Pull complete
51a9a9b4ef36: Pull complete
Digest: sha256:d9b934cdf6826629f8d02ea01f28b2c4ddb1ae27c32664b14867324b3e5e1291
Status: Downloaded newer image for mysql:5.7
913cc4e85242f73a122ddeb99e27e37c1a1149377d4b4ea1b845b7346b299889
esther@DESKTOP-TF5UUC2:~$
```

Comprobamos que todo ha salido bien accediendo a Wordpress:



Parte 6. Caso práctico 1. Wordpress con Docker Compose.

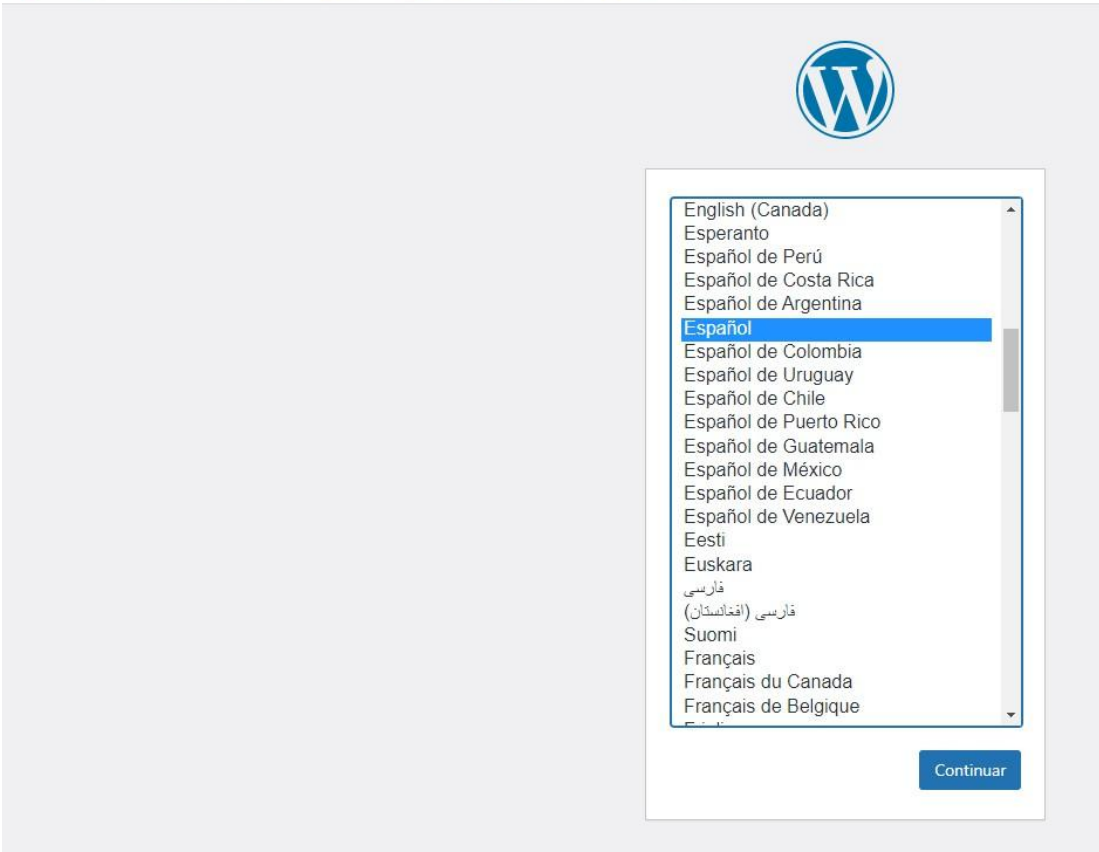
Nos situamos en la carpeta donde tenemos el fichero docker-compose.yml y lo lanzamos:

```
esther@DESKTOP-TF5UUC2:/mnt/c/Users/da_gr/OneDrive/Escritorio$ docker-compose up -d
[+] Running 4/4
  Network escritorio_default      Created                                0.8s
  Volume "escritorio_db_data"    Created                                0.0s
  Container escritorio_db_1       Started                               2.2s
  Container escritorio_wordpress_1 Started                               3.2s
esther@DESKTOP-TF5UUC2:/mnt/c/Users/da_gr/OneDrive/Escritorio$
```

Para comprobar que ha funcionado accedemos a wordpress y configuramos el sitio:

← → ↻ localhost:8000/wp-admin/install.php

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English (Canada)
Esperanto
Español de Perú
Español de Costa Rica
Español de Argentina
Español
Español de Colombia
Español de Uruguay
Español de Chile
Español de Puerto Rico
Español de Guatemala
Español de México
Español de Ecuador
Español de Venezuela
Eesti
Euskara
فارسی
فارسی (افغانستان)
Suomi
Français
Français du Canada
Français de Belgique

Continuar

Practic6 1 0 + Añadir

Hola, Esther

Opciones de pantalla Ayuda

Escritorio

Inicio
Actualizaciones
Entradas
Medios
Páginas
Comentarios
Apariencia
Plugins
Usuarios
Herramientas
Ajustes
Cerrar menú

¡Bienvenido a WordPress!
Hemos recopilado algunos enlaces para que puedas comenzar:

Descartar

Primeros pasos

Personaliza tu sitio
o [cambia tu tema por completo](#)

Siguientes pasos

- Escribe tu primera entrada en el blog
- Añade una página «Acerca de»
- Establece tu página de inicio
- Ver tu sitio

Más acciones

- Gestionar widgets
- Gestionar menús
- Activa o desactiva los comentarios
- Aprende más sobre cómo empezar

Estado de salud del sitio

Aún no hay información... Las pruebas de salud del sitio se ejecutarán automáticamente de forma periódica para obtener información sobre tu sitio. También puedes [visitar ahora la pantalla de salud del sitio](#) para obtener información sobre tu sitio.

De un vistazo

- 1 entrada
- 1 página
- 1 comentario

WordPress 5.8.1 está funcionando con el tema [Twenty Twenty-One](#).

[Motores de búsqueda desactivados](#)

Borrador rápido

Título

Contenido

¿En qué estás pensando?

Guardar borrador

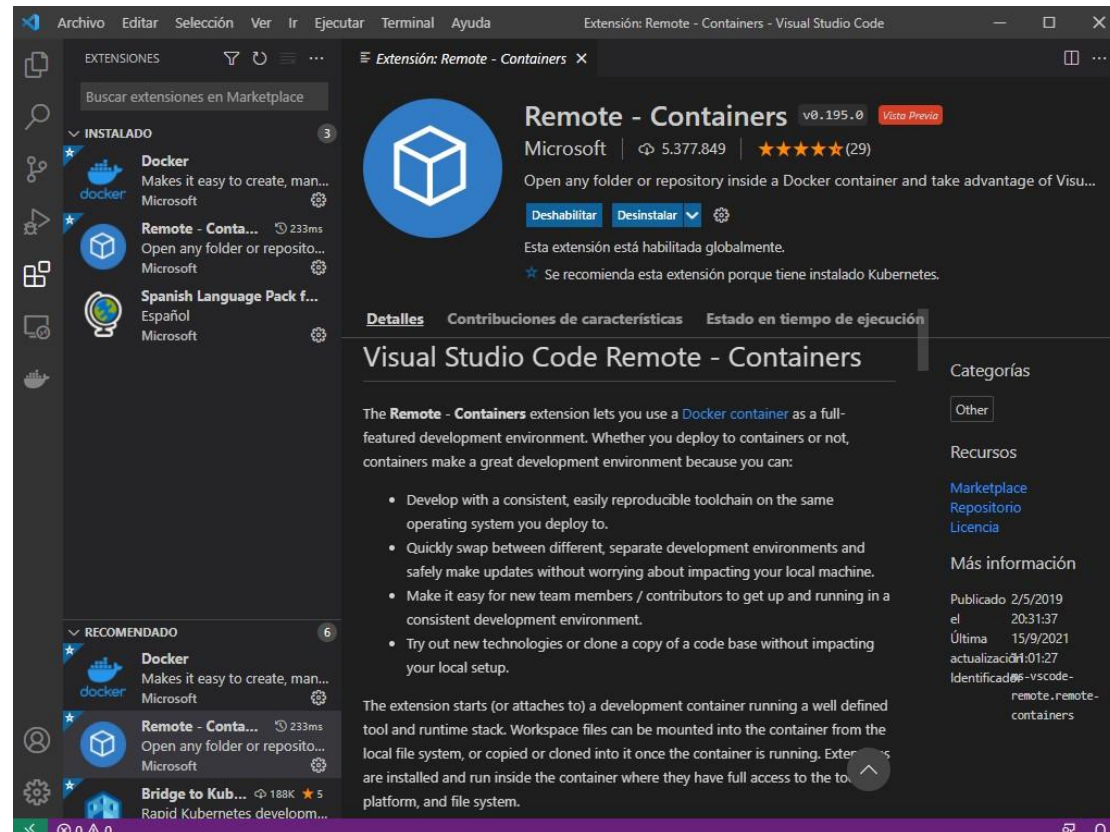
Eventos y noticias de WordPress

Comprobamos que podemos parar y relanzar el sistema cuando queramos:

```
esther@DESKTOP-TF5UUC2:/mnt/c/Users/da_gr/OneDrive/Escritorio$ docker-compose down
[+] Running 3/3
  Container escritorio_wordpress_1 Removed      2.8s
  Container escritorio_db_1         Removed      2.1s
  Network escritorio_default        Removed      0.8s
esther@DESKTOP-TF5UUC2:/mnt/c/Users/da_gr/OneDrive/Escritorio$ docker-compose up -d
[+] Running 3/3
  Network escritorio_default        Created      0.8s
  Container escritorio_db_1         Started      2.5s
  Container escritorio_wordpress_1 Started      3.6s
esther@DESKTOP-TF5UUC2:/mnt/c/Users/da_gr/OneDrive/Escritorio$
```

Parte 7. Caso práctico 1. Desarrollando con Visual Studio Code en un contenedor.

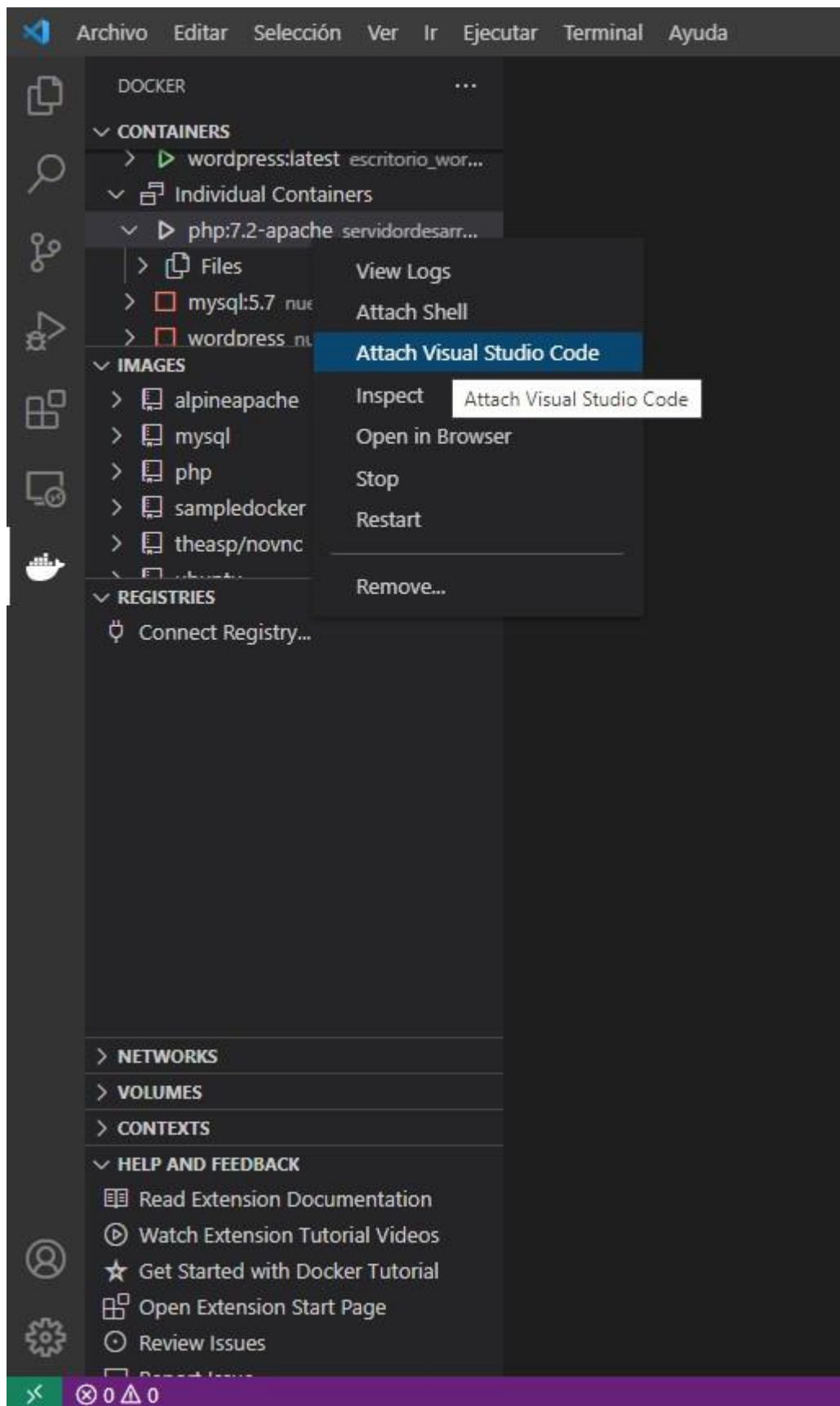
Primero instalamos Visual Studio y los plugins necesarios para usarlo con Docker:



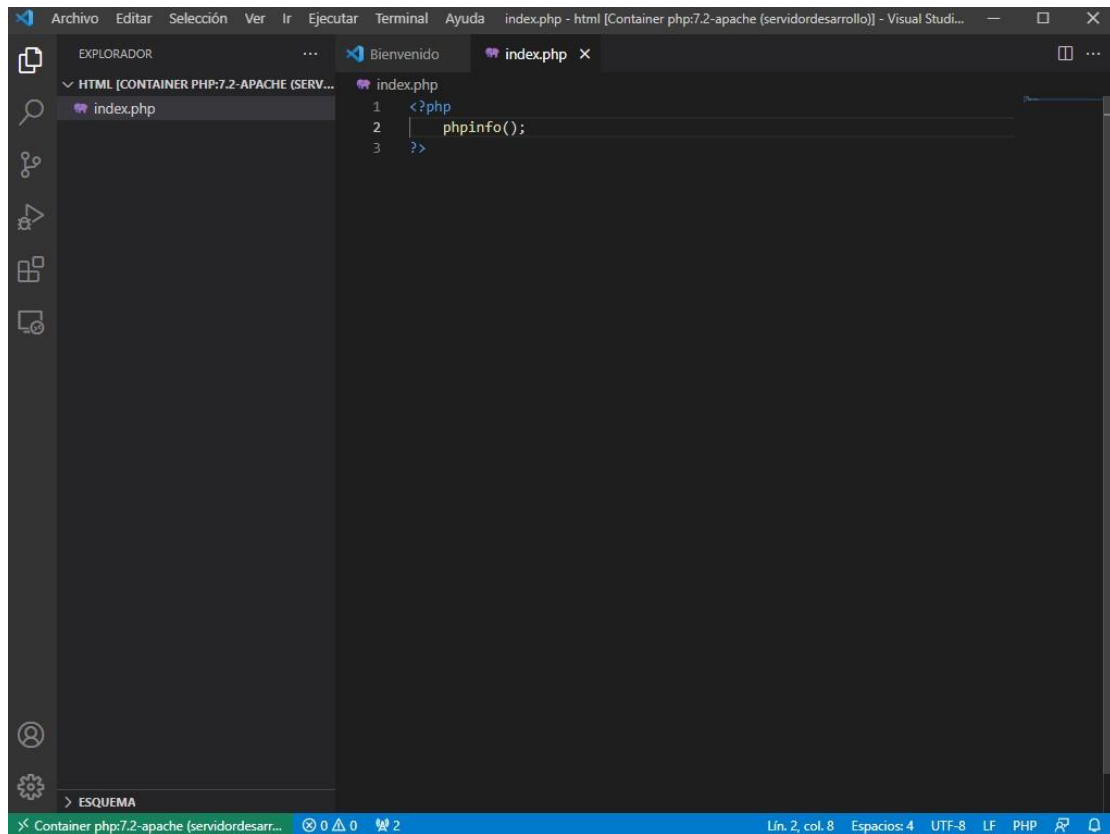
Creamos el contenedor:

```
esther@DESKTOP-TF5UUC2:~$ docker run -d --name servidor desarrollo -p 8080:80 php:7.2-apache
Unable to find image 'php:7.2-apache' locally
7.2-apache: Pulling from library/php
6ec7b7d162b2: Pull complete
db606474d60c: Pull complete
afb30f0cd8e0: Pull complete
3bb2e8051594: Pull complete
4c761b44e2cc: Pull complete
c2199db96575: Pull complete
1b9a9381eea8: Pull complete
fd07bbc59d34: Pull complete
72b73ab27698: Pull complete
983308f4f0d6: Pull complete
6c13f026e6da: Pull complete
e5e6cd163689: Pull complete
5c5516e56582: Pull complete
154729f6ba86: Pull complete
Digest: sha256:4dc0f0115acf8c2f0df69295ae822e49f5ad5fe849725847f15aa0e5802b55f8
Status: Downloaded newer image for php:7.2-apache
8da37be2e8a91ef9754f3ec777423c17457ea329dee1df0da4e5715e58c0cee
esther@DESKTOP-TF5UUC2:~$
```

Dentro de Visual Studio, en el icono de la ballena, podremos ver un listado de nuestros contenedores, seleccionamos el que acabamos de crear y hacemos click derecho, entonces pulsamos en Attach Visual Studio Code para “enlazarlo” a la aplicación:




Una vez hecho esto nos colocamos en el directorio `var/www/html` y creamos el fichero `index.php`:




Comprobamos que todo ha salido bien entrando en el localhost:

← → ↻ ⓘ localhost:8080

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PHP Version 7.2.34


System	Linux 069d72d81f1d 5.10.16.3-microsoft-standard-WSL2 #1 SMP Fri Apr 2 22:23:49 UTC 2021 x86_64
Build Date	Dec 11 2020 10:50:00
Configure Command	'./configure' '--build=x86_64-linux-gnu' '--with-config-file-path=/usr/local/etc/php' '--with-config-file-scan-dir=/usr/local/etc/php/conf.d' '--enable-option-checking=fatal' '--with-mhash' '--with-pic' '--enable-ftp' '--enable-mbstring' '--enable-mysqlnd' '--with-password-argon2' '--with-sodium=shared' '--with-pdo-sqlite=/usr' '--with-sqlite3=/usr' '--with-curl' '--with-libedit' '--with-openssl' '--with-zlib' '--with-libdir=lib/x86_64-linux-gnu' '--with-apxs2' '--disable-cgi' 'build_alias=x86_64-linux-gnu'
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/etc/php
Loaded Configuration File	(none)
Scan this dir for additional .ini files	/usr/local/etc/php/conf.d
Additional .ini files parsed	/usr/local/etc/php/conf.d/docker-php-ext-sodium.ini
PHP API	20170718
PHP Extension	20170718
Zend Extension	320170718
Zend Extension Build	API320170718.NTS
PHP Extension Build	API20170718.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	provided by mbstring
IPv6 Support	enabled
DTrace Support	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
Registered Stream Filters	zlib.*, convert.iconv.*, string.rot13, string.toupper, string.tolower, string.strip_tags, convert.*, consumed, dechunk

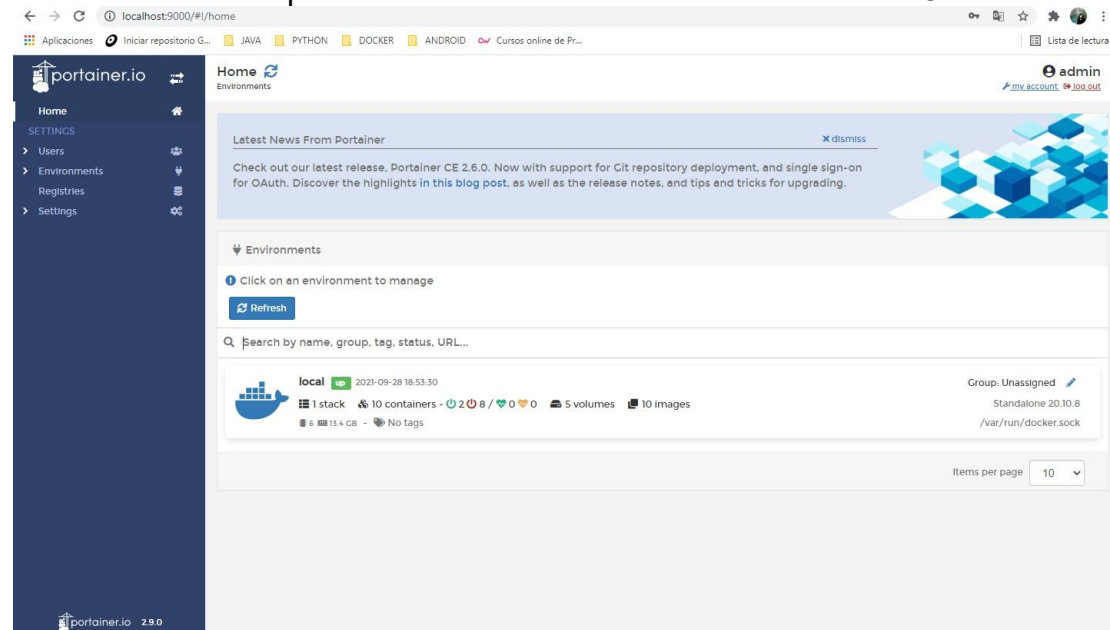
This program makes use of the Zend Scripting Language Engine:


Parte 7. Caso práctico 2. Gestionando Docker con Portainer CE.

Creamos y lanzamos el contenedor que tiene todo lo necesario para que funcione Portainer CE:

```
esther@DESKTOP-TF5UUC2: ~  
esther@DESKTOP-TF5UUC2:~$ docker volume create portainer_data  
portainer_data  
esther@DESKTOP-TF5UUC2:~$ docker run -d -p 8000:8000 -p 9000:9000 --name=portainer --restart=always -v /var/run/docker.sock:/var/run/docker.sock -v portainer_data:/data portainer/portainer-ce  
Unable to find image 'portainer/portainer-ce:latest' locally  
latest: Pulling from portainer/portainer-ce  
7721cab3d696: Pull complete  
0645e7e2a110: Pull complete  
86253b00ae0d: Pull complete  
Digest: sha256:689908f8396e840e7fcff09ce85532291bab9a907b9801ff9c9ded83a18167b9  
Status: Downloaded newer image for portainer/portainer-ce:latest  
25f6807bc34a63ddc071d7f7ed90d0ee3f5d324e6404d928658785d2a83e2a0b
```

Si todo ha ido bien podremos acceder a la interfaz de Portainer CE:



Entramos en local y en el menú de la izquierda en App Templates, escribimos nginx en la barra de búsqueda:

Ahora podremos ver una lista con todos nuestros contenedores, entre ellos el que acabamos de crear a través de la interfaz:

Container list

Containers

Start Stop Kill Restart Pause Resume Remove Add container

Search...

Name	State	Quick actions	Stack	Image	Created	IP Address	Published Ports	Ownership
miservidor	running		-	nginx:latest	2021-09-28 18:57:35	172.17.0.3	58276:443 58277:80	administrat
portainer	running		-	portainer/portainer-ce	2021-09-28 18:52:21	172.17.0.2	8000:8000 9000:9000	administrat
escritorio_db_1	running		escritorio	mysql:5.7	2021-09-24 13:24:19	172.20.0.2	-	administrat
servidoresarrollo	stopped		-	php:7.2-apache	2021-09-27 21:14:43	-	-	administrat
escritorio_wordpress_1	stopped		escritorio	wordpress:latest	2021-09-24 13:24:19	-	-	administrat
nuestromysql	stopped		-	mysql:5.7	2021-09-24 11:26:48	-	-	administrat
nuestrowp	stopped		-	wordpress	2021-09-24 11:16:41	-	-	administrat
busy_snyder	stopped		-	alpineapache	2021-09-19 13:25:43	-	-	administrat
vigilant_ganguly	stopped		-	sampledocker	2021-09-19 13:09:34	-	-	administrat
distracted_montalcini	stopped		-	ubuntunano	2021-09-19 11:50:32	-	-	administrat

Items per page 10 1 2

localhost:58277

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Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.