Manual WordPress

DESPLEGANDO EL CMS WORDPRESS

Índice

Introducción:

En esta práctica se despliega el CMS WordPress, utilizando dos contenedor y una red que los conecta

Instalación:

Estos son los comandos necesarios para montar el entorno de Wordpress sobre dos contenedores conectados a la red, red_wp.

$ docker network create red_wp docker run -d --name servidor_mysql
--network red_wp
-v /opt/mysql_wp:/var/lib/mysql
-e MYSQL_DATABASE=bdd_wp
-e MYSQL_USER=elisa_wp
-e MYSQL_PASSWORD=elisa
-e MYSQL_ROOT_PASSWORD=elisa
mariadb

$docker run -d --name servidor_wp
--network red_wp
-v /opt/wordpress:/var/www/html/wp-content
-e WORDPRESS_DB_HOST=servidor_mysql
-e WORDPRESS_DB_USER=user_wp
-e WORDPRESS_DB_PASSWORD=asdasd
-e WORDPRESS_DB_NAME=bd_wp
-p 80:80
wordpress

Elementos importantes:

El contenedor servidor_mysql ejecuta un script docker-entrypoint.sh que es el encargado de configurar la base de datos y termina ejecutando el servidor mariadb. Al crear la imagen mariadb tiene que permitir la conexión desde otra máquina, por lo que en la configuración tenemos comentado el parámetro bind-address. Bind-address

Del contenedor servidor_wp ejecuta un script docker-entrypoint.sh, a partir de las variables de entorno, ha creado el fichero wp-config.php de wordpress.

```
elisa@ELISA-C-H: /mnt/c/Use
Microsoft Windows [Versión 10.0.22631.4460]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\Elisa>wsl
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker network create red_wp
Error response from daemon: network with name red_wp already exists
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker run -d --name servidor_mysql \
          --network red_wp \
          -v /opt/mysql_wp:/var/lib/mysql \
          -e MYSQL_DATABASE=bdd_wp \
          -e MYSQL_USER=elisa_wp \
          -e MYSQL_PASSWORD=elisa \
          -e MYSQL_ROOT_PASSWORD=elisa \
          mariadb
0a07f44db44bd7b41beabaf32dbefacfa73753f043bd4cfdb3466c59ba1c68d1
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker run -d --name servidor_wp \
          --network red_wp \
          -v /opt/wordpress:/var/www/html/wp-content \
          -e WORDPRESS_DB_HOST=servidor_mysql \
          -e WORDPRESS_DB_USER=elisa_wp \
          -e WORDPRESS_DB_PASSWORD=elisa \
          -e WORDPRESS_DB_NAME=bdd_wp \
          -p 8081:80 \
          wordpress
4be23544f68b38f87718a02042f3717acdcc607d61ed6600b1c85be8b90202b6
elisa@ELISA-C-H:/mnt/c/Users/Elisa$
```

Desarrollo de la práctica:

Cuestiones;

- Ejecuta una instrucción docker para visualizar el contenido del fichero `wp-config.php` y verifica que los parámetros de conexión a la base de datos son los mismo que los indicados en las variables de entorno.

$ docker exec -it servidor_wp bash

$ cat wp-config.php

```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wp bash
root@4be23544f68b:/var/www/html# cat wp-config.php
<?php
/**
 * The base configuration for WordPress
 *
 * The wp-config.php creation script uses this file during the installation.
 * You don't have to use the website, you can copy this file to "wp-config.php"
 * and fill in the values.
 *
 * This file contains the following configurations:
 *
 * * Database settings
 * * Secret keys
 * * Database table prefix
 * * ABSPATH
 *
 * This has been slightly modified (to read environment variables) for use in Docker.
 *
 * @link https://developer.wordpress.org/advanced-administration/wordpress/wp-config/
 *
 * @package WordPress
 */

// IMPORTANT: this file needs to stay in-sync with https://github.com/WordPress/WordPress/blob/master/wp-config-sample.p
hp
// (it gets parsed by the upstream wizard in https://github.com/WordPress/WordPress/blob/f27cb65e1ef25d11b535695a660e728
2b98eb742/wp-admin/setup-config.php#L356-L392)

// a helper function to lookup "env_FILE", "env", then fallback
```

Instalar iputils-ping

Dentro del contenedor servidor_wp hacer

$ apt-get update

$ apt-get install -y iputils-ping

```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wp bash
root@4be23544f68b:/var/www/html# apt-get update
Get:1 http://deb.debian.org/debian bookworm InRelease [151 kB]
Get:2 http://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]
Get:3 http://deb.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Get:4 http://deb.debian.org/debian bookworm/main amd64 Packages [8789 kB]
Get:5 http://deb.debian.org/debian bookworm-updates/main amd64 Packages [2712 B]
Get:6 http://deb.debian.org/debian-security bookworm-security/main amd64 Packages [206 kB]
Fetched 9251 kB in 16s (561 kB/s)
Reading package lists... Done
root@4be23544f68b:/var/www/html# apt-get install -y iputils-ping
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcap2-bin libpam-cap
The following NEW packages will be installed:
  iputils-ping libcap2-bin libpam-cap
0 upgraded, 3 newly installed, 0 to remove and 2 not upgraded.
Need to get 96.3 kB of archives.
After this operation, 312 kB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bookworm/main amd64 libcap2-bin amd64 1:2.66-4 [34.7 kB]
Get:2 http://deb.debian.org/debian bookworm/main amd64 iputils-ping amd64 3:20221126-1+deb12u1 [47.2 kB]
Get:3 http://deb.debian.org/debian bookworm/main amd64 libpam-cap amd64 1:2.66-4 [14.5 kB]
Fetched 96.3 kB in 0s (215 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package libcap2-bin.
(Reading database ... 16610 files and directories currently installed.)
Preparing to unpack .../libcap2-bin_1%3a2.66-4_amd64.deb ...
Unpacking libcap2-bin (1:2.66-4) ...
```

$ docker exec -it servidor_wp ping -c 4 servidor_mysql

para 5 pings

```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wp ping -c 5 servidor_mysql
PING servidor_mysql (172.20.0.2) 56(84) bytes of data.
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=1 ttl=64 time=0.215 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=2 ttl=64 time=0.069 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=3 ttl=64 time=0.077 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=4 ttl=64 time=0.073 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=5 ttl=64 time=0.068 ms

--- servidor_mysql ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4100ms
rtt min/avg/max/mdev = 0.068/0.100/0.215/0.057 ms
elisa@ELISA-C-H:/mnt/c/Users/Elisa$
```

Troubleshooting:

salirse de root

```
root@4be23544f68b:/var/www/html# docker exec -it servidor_wp ping -c 5 servidor_mysql
bash: docker: command not found
root@4be23544f68b:/var/www/html# docker exec -it servidor_wp ping -c 5 servidor_mysql
bash: docker: command not found
root@4be23544f68b:/var/www/html# exit
exit
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wping -c 5 servidor_mysql
Error response from daemon: No such container: servidor_wping
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wp ping -c 5 servidor_mysql
PING servidor_mysql (172.20.0.2) 56(84) bytes of data.
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=1 ttl=64 time=0.215 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=2 ttl=64 time=0.069 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=3 ttl=64 time=0.077 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=4 ttl=64 time=0.073 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=5 ttl=64 time=0.068 ms

--- servidor_mysql ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4100ms
rtt min/avg/max/mdev = 0.068/0.100/0.215/0.057 ms
elisa@ELISA-C-H:/mnt/c/Users/Elisa$
```

- Visualiza el fichero `/etc/mysql/mariadb.conf.d/50-server.cnf` del contenedor con la base de datos y comprueba cómo está configurado el parámetro `bind-address`.

docker exec -it servidor_mysql bash

cat /etc/mysql/mariadb.conf.d/50-server.cnf

```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_wp ping -c 5 servidor_mysql
PING servidor_mysql (172.20.0.2) 56(84) bytes of data.
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=1 ttl=64 time=0.215 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=2 ttl=64 time=0.069 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=3 ttl=64 time=0.077 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=4 ttl=64 time=0.073 ms
64 bytes from servidor_mysql.red_wp (172.20.0.2): icmp_seq=5 ttl=64 time=0.068 ms

--- servidor_mysql ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4100ms
rtt min/avg/max/mdev = 0.068/0.100/0.215/0.057 ms
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker exec -it servidor_mysql bash
root@0a07f44db44b:/# cat  /etc/mysql/mariadb.conf.d/50-server.cnf
#
# These groups are read by MariaDB server.
# Use it for options that only the server (but not clients) should see

# this is read by the standalone daemon and embedded servers
[server]

# this is only for the mariadbd daemon
[mariadbd]

#
# * Basic Settings
#

#user                   = mysql
pid-file                = /run/mysqld/mysqld.pid
basedir                 = /usr
#datadir                 = /var/lib/mysql
#tmpdir                  = /tmp
```

- Instala Drupal (CMS PHP) siguiendo la documentación de Docker Hub de la aplicación seleccionada.

$ docker network create drupal-network

```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker network create drupal-network
c86908d68645a610cc76680ab63389a8ecf77d821231972a98a48f1eadff70e9
```

$ docker run --name drupal-db --network drupal-network -e MYSQL_ROOT_PASSWORD=rootpassword -e MYSQL_DATABASE=drupal -d mariadb:latest

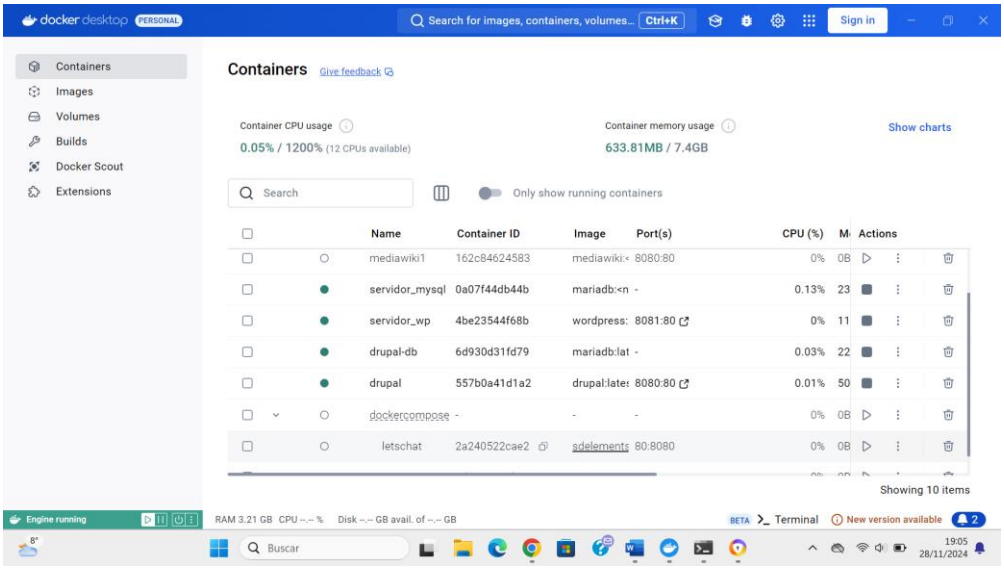
```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker run --name drupal-db --network drupal-network -e MYSQL_ROOT_PASSWORD=rootpassword -e MYSQL
_DATABASE=drupal -d mariadb:latest
6d930d31fd790711eeaa9827431c9e6b65158c1b7254d232bac812439fbc8579
```

docker run --name drupal --network drupal-network -p 8080:80 -d drupal:latest

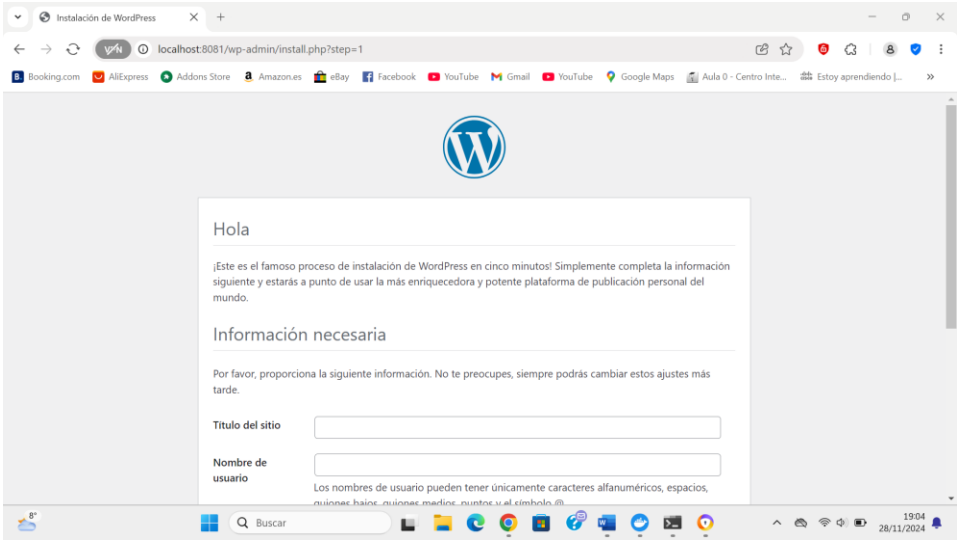
```
elisa@ELISA-C-H:/mnt/c/Users/Elisa$ docker run --name drupal --network drupal-network -p 8080:80 -d drupal:latest
Unable to find image 'drupal:latest' locally
latest: Pulling from library/drupal
faa1aa447fac: Download complete
c3b04b7031fb: Download complete
0217fa02fd5f: Download complete
119202f2b319: Download complete
7bd375cf222d: Download complete
e41950bab19c: Download complete
566d672bde14: Download complete
47d8d2e94654: Download complete
4f4fb700ef54: Already exists
5e78f6431083: Download complete
c9b792fec1b5: Download complete
967cc2bfc108: Download complete
0a6a316c0df1: Download complete
0941d9a564d8: Download complete
6bd411f449cd: Download complete
ae154bbfd094: Download complete
193b424feb9d: Download complete
7d111fc47c43: Download complete
Digest: sha256:4c432c3470aef860cf177a10d24b2f310c9b7ffbcaa1d073ed823419ad180f2f
Status: Downloaded newer image for drupal:latest
557b0a41d1a20706ac1617bc050dc4eb9f715d3de97139c2d9e50b298b373eb1
```

Si presenta un error por la puerta, poner 8081:80

Página de los contenedores en DockerDesktop



Página web de WordPress



Página web de drupal.