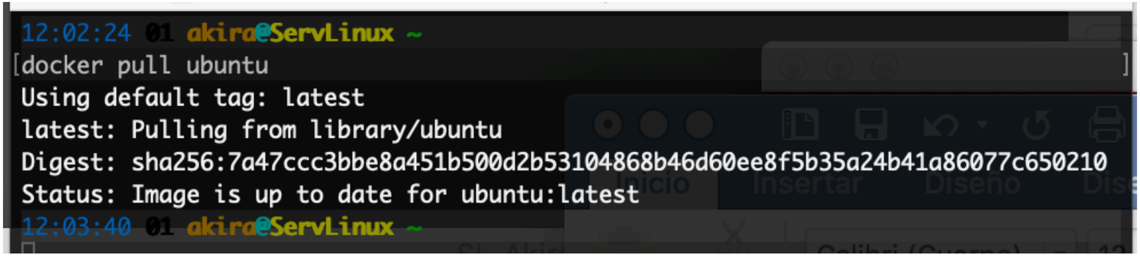
Akira Alonso Domenech

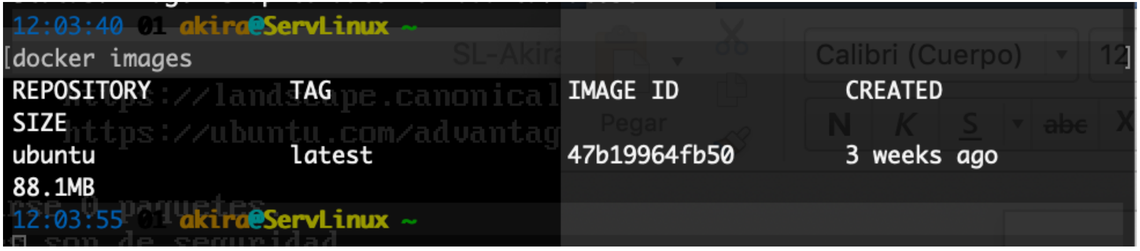
## Ejercicio 1

Vamos a crear un docker para instalar y mysql
Para ello comenzamos descargando una imagen de Ubuntu



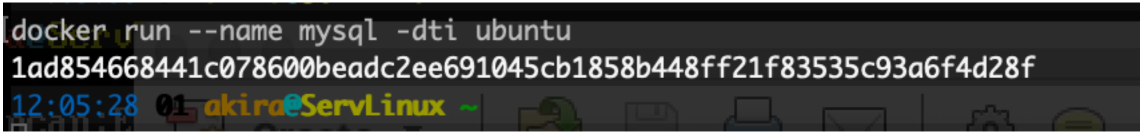
```
12:02:24 01 akira@ServLinux ~
[docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
Digest: sha256:7a47ccc3bbe8a451b500d2b53104868b46d60ee8f5b35a24b41a86077c650210
Status: Image is up to date for ubuntu:latest
12:03:40 01 akira@ServLinux ~
```

Comprobamos que tengamos la imagen descargada



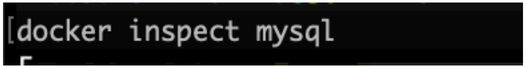
```
12:03:40 01 akira@ServLinux ~
[docker images
REPOSITORY          TAG                 IMAGE ID            CREATED
SIZE
ubuntu              latest              47b19964fb50        3 weeks ago
88.1MB
12:03:55 01 akira@ServLinux ~
```

Creamos nuestro docker llamado como myslq

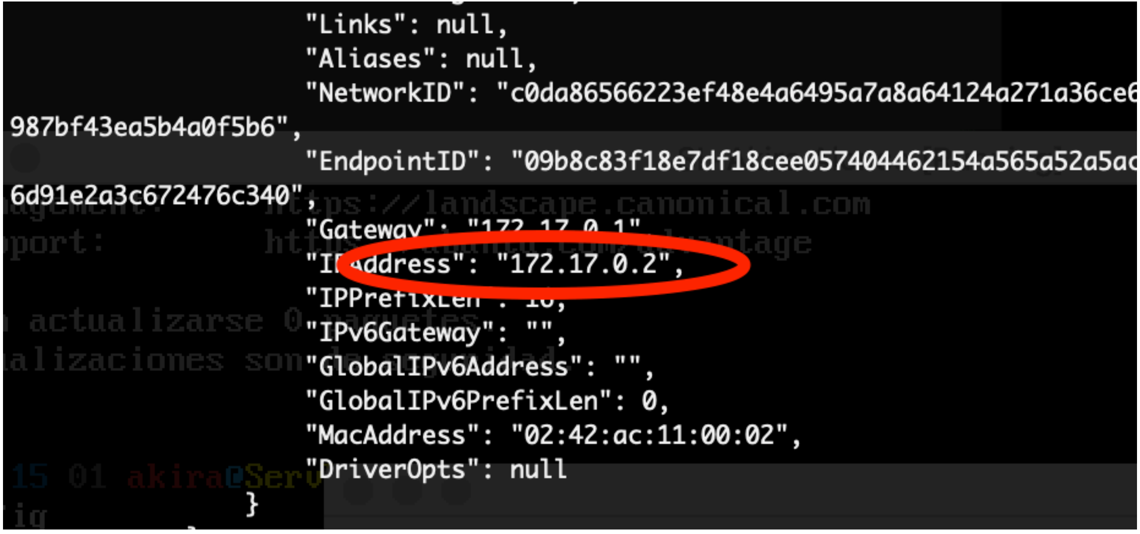


```
[docker run --name mysql -dti ubuntu
1ad854668441c078600beadc2ee691045cb1858b448ff21f83535c93a6f4d28f
12:05:28 01 akira@ServLinux ~
```

Comprobamos la ip que nos crea el docker

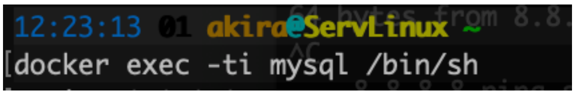


```
[docker inspect mysql
```



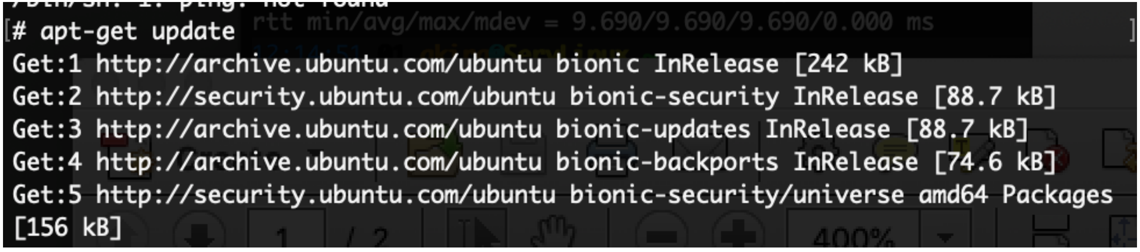
```
                    "Links": null,
                    "Aliases": null,
                    "NetworkID": "c0da86566223ef48e4a6495a7a8a64124a271a36ce6
987bf43ea5b4a0f5b6",
                    "EndpointID": "09b8c83f18e7df18cee057404462154a565a52a5ac
6d91e2a3c672476c340",
                    "Gateway": "172.17.0.1",
                    "IPAddress": "172.17.0.2",
                    "IPPrefixLen": 16,
                    "IPv6Gateway": "",
                    "GlobalIPv6Address": "",
                    "GlobalIPv6PrefixLen": 0,
                    "MacAddress": "02:42:ac:11:00:02",
                    "DriverOpts": null
                }
```

Accedemos a nuestra Shell mediante la ip 172.17.0.2 en la cual instalaremos nuestro servidor de mysql junto con un apache y un phpmyadmin para gestionarlo



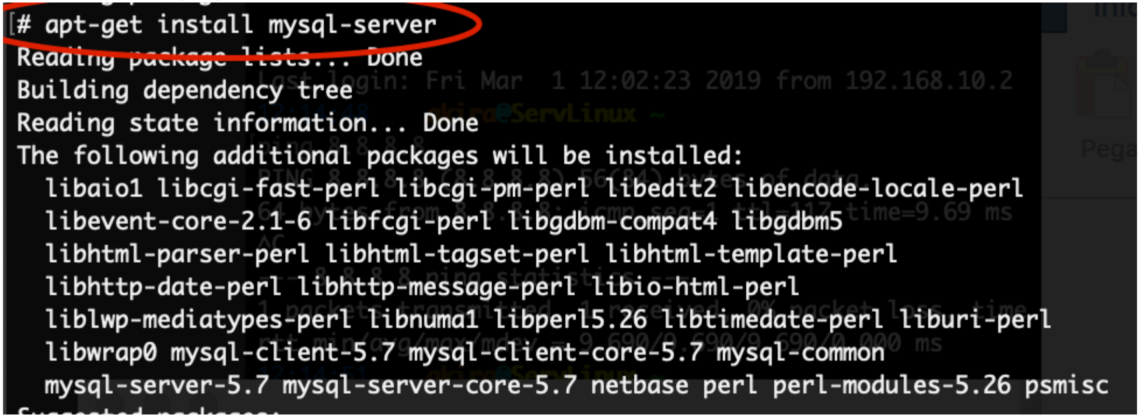
```
12:23:13 01 akira@ServLinux ~
[docker exec -ti mysql /bin/sh
```

Vamos a actualizar los repositorios con apt-get update



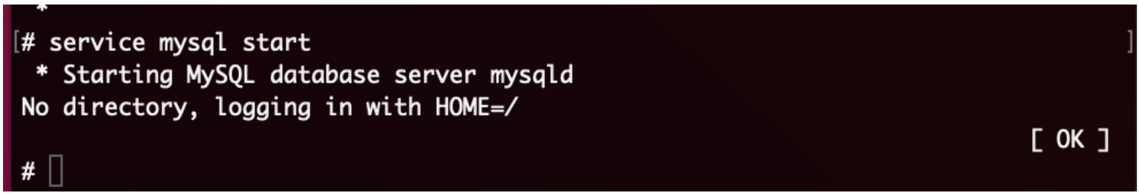
```
[# apt-get update
 Get:1 http://archive.ubuntu.com/ubuntu bionic InRelease [242 kB]
 Get:2 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
 Get:3 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
 Get:4 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
 Get:5 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 Packages
 [156 kB]
```

Instalamos mysql



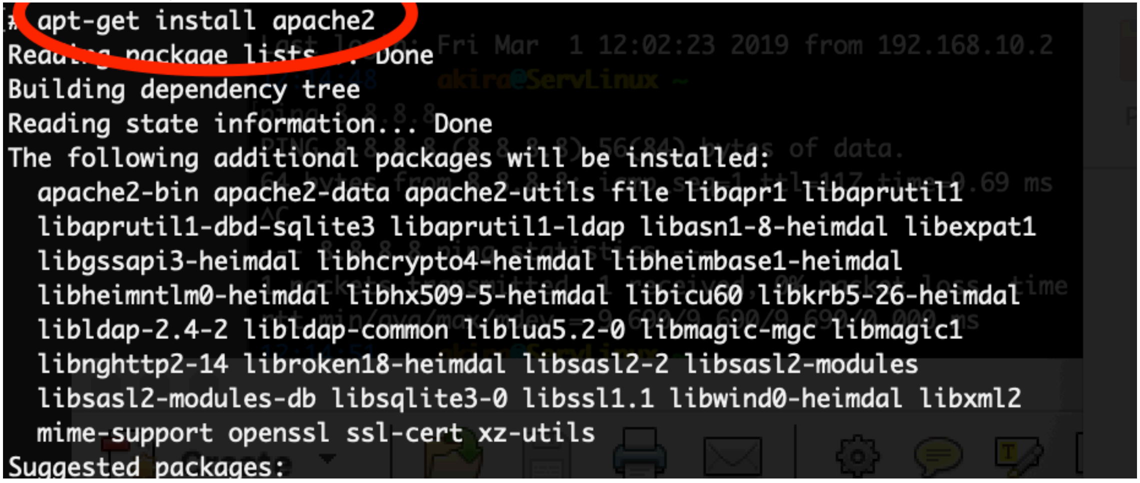
```
[# apt-get install mysql-server
 Reading package lists... Done
 Building dependency tree
 Reading state information... Done
 The following additional packages will be installed:
   libaio1 libcgi-fast-perl libcgi-pm-perl libedit2 libencode-locale-perl
   libevent-core-2.1-6 libfcgi-perl libgdbm-compat4 libgdbm5
   libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
   libhttp-date-perl libhttp-message-perl libio-html-perl
   liblwp-mediatypes-perl libnuma1 libperl5.26 libtimedate-perl liburi-perl
   libwrap0 mysql-client-5.7 mysql-client-core-5.7 mysql-common
   mysql-server-5.7 mysql-server-core-5.7 netbase perl perl-modules-5.26 psmisc
```

Iniciamos el servicio



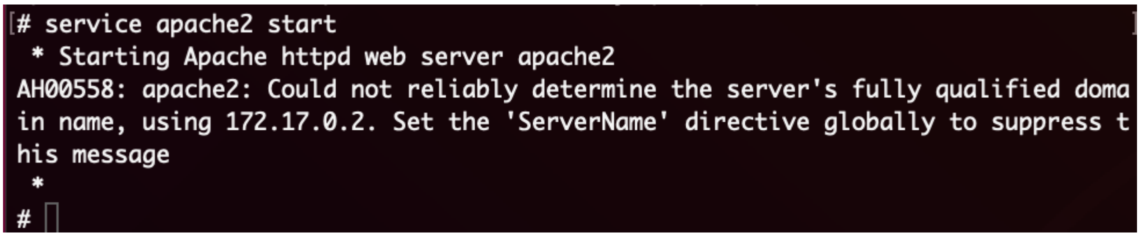
```
[# service mysql start
  * Starting MySQL database server mysqld
 No directory, logging in with HOME=/
                                                                    [ OK ]
 #
```

Instalamos apache



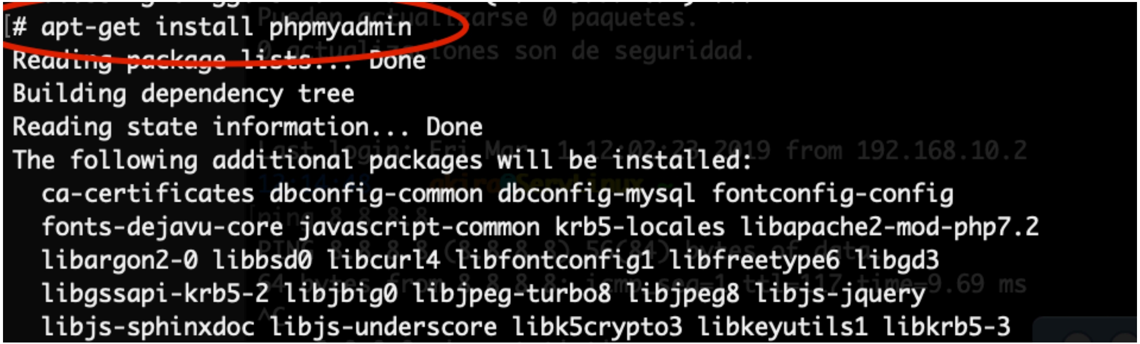
```
# apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils file libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libasn1-8-heimdal libexpat1
  libgssapi3-heimdal libhcrypto4-heimdal libheimbase1-heimdal
  libheimntlm0-heimdal libhx509-5-heimdal libicu60 libkrb5-26-heimdal
  libldap-2.4-2 libldap-common liblua5.2-0 libmagic-mgc libmagic1
  libnghttp2-14 libroken18-heimdal libsasl2-2 libsasl2-modules
  libsasl2-modules-db libsqlite3-0 libssl1.1 libwind0-heimdal libxml2
  mime-support openssl ssl-cert xz-utils
Suggested packages:
```

Iniciamos el servicio

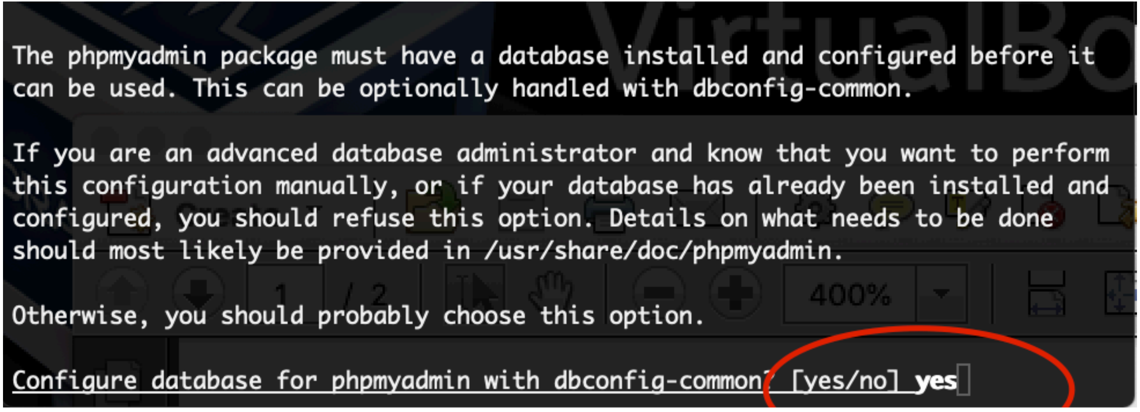


```
# service apache2 start
 * Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified doma
in name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress t
his message
 *
# 
```

Instalamos phpmyadmin

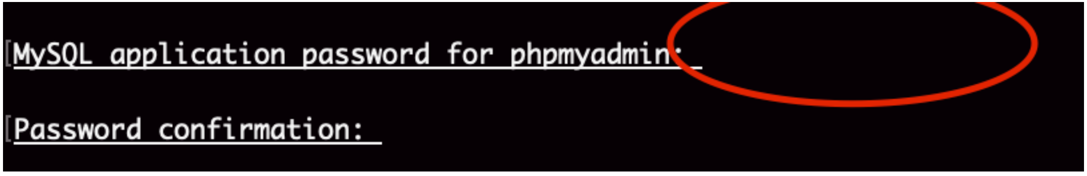


```
# apt-get install phpmyadmin
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ca-certificates dbconfig-common dbconfig-mysql fontconfig-config
  fonts-dejavu-core javascript-common krb5-locales libapache2-mod-php7.2
  libargon2-0 libbsd0 libcurl4 libfontconfig1 libfreetype6 libgd3
  libgssapi-krb5-2 libjbig0 libjpeg-turbo8 libjpeg8 libjs-jquery
  libjs-sphinxdoc libjs-underscore libk5crypto3 libkeyutils1 libkrb5-3
```



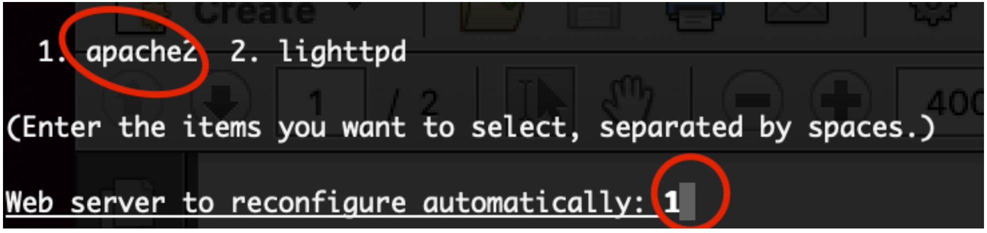
```
The phpmyadmin package must have a database installed and configured before it
can be used. This can be optionally handled with dbconfig-common.

If you are an advanced database administrator and know that you want to perform
this configuration manually, or if your database has already been installed and
configured, you should refuse this option. Details on what needs to be done
should most likely be provided in /usr/share/doc/phpmyadmin.

Otherwise, you should probably choose this option.

Configure database for phpmyadmin with dbconfig-common? [yes/no] yes
```

Nos pide el password de mysql para la configuración



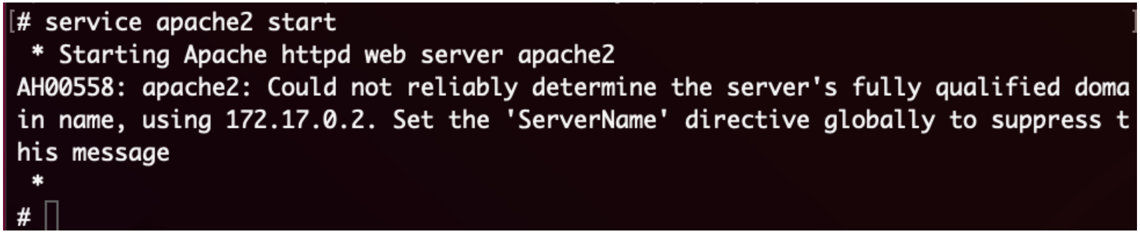
```
MySQL application password for phpmyadmin: 

Password confirmation: 
```

Seleccionamos apache como gestor



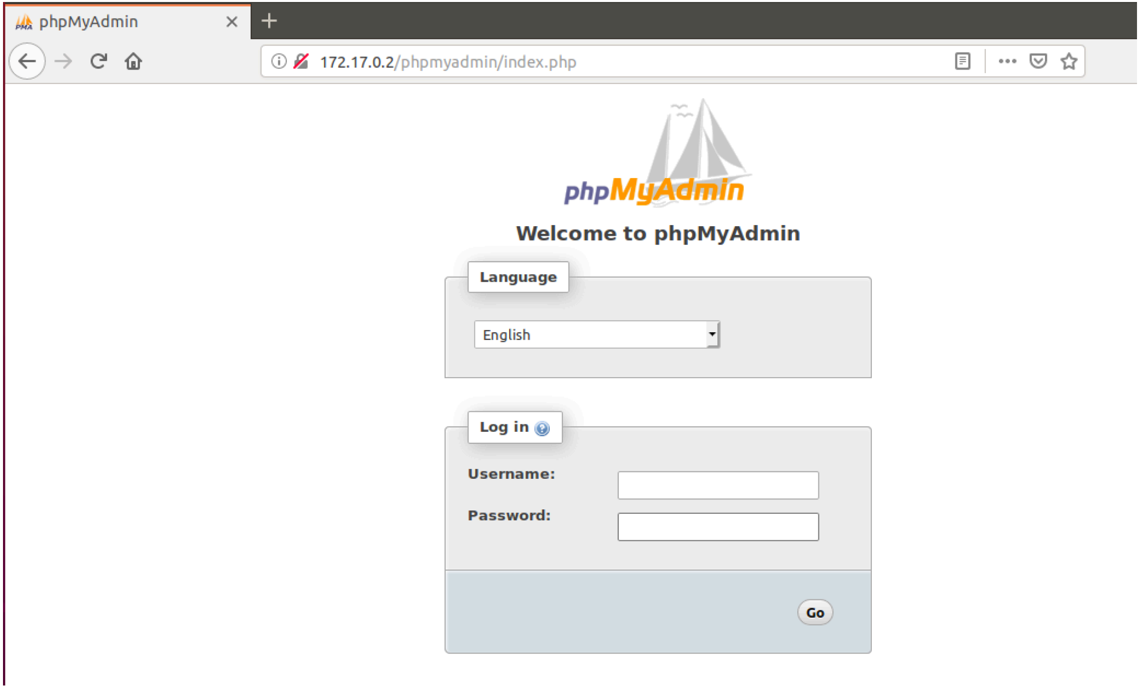
```
  1. apache2  2. lighttpd

(Enter the items you want to select, separated by spaces.)

Web server to reconfigure automatically: 1
```

Y una vez instalado reiniciamos el apache



```
# service apache2 start
 * Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified doma
in name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress t
his message
 *
# 
```

Comprobamos que nos cargue la pagina de phpmyadmin



Welcome to phpMyAdmin

Language

English

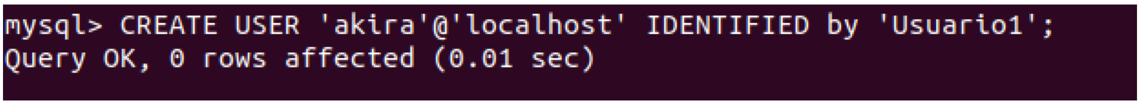
Log in

Username:

Password:

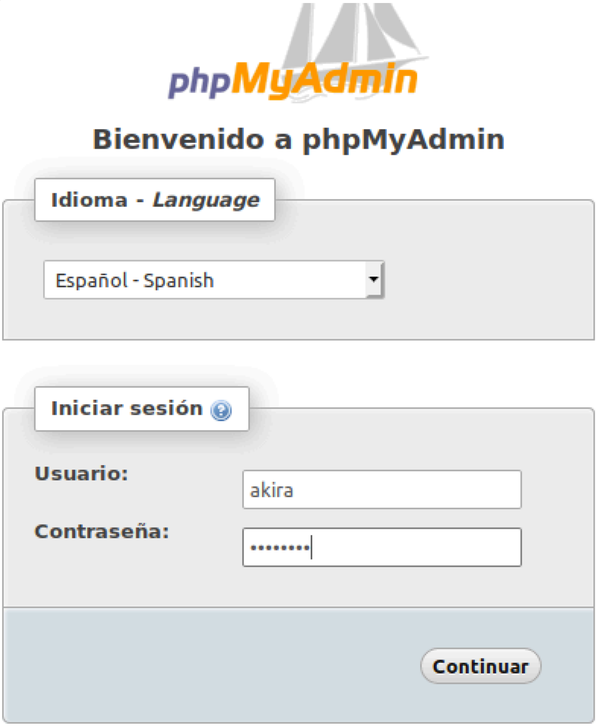
Para poder acceder a nuestra Base de datos necesitaremos un usuario por lo que ejecutaremos mysql -u root en  nuestro docker y crearemos el usuario

Ya que no viene instalado el cliente de mysql lo instalamos: apt-get install mysql



```
mysql> CREATE USER 'akira'@'localhost' IDENTIFIED by 'Usuario1';
Query OK, 0 rows affected (0.01 sec)
```

Una vez creado entramos con nuestras credenciales para comprobar que funciona en phpmyadmin



Bienvenido a phpMyAdmin

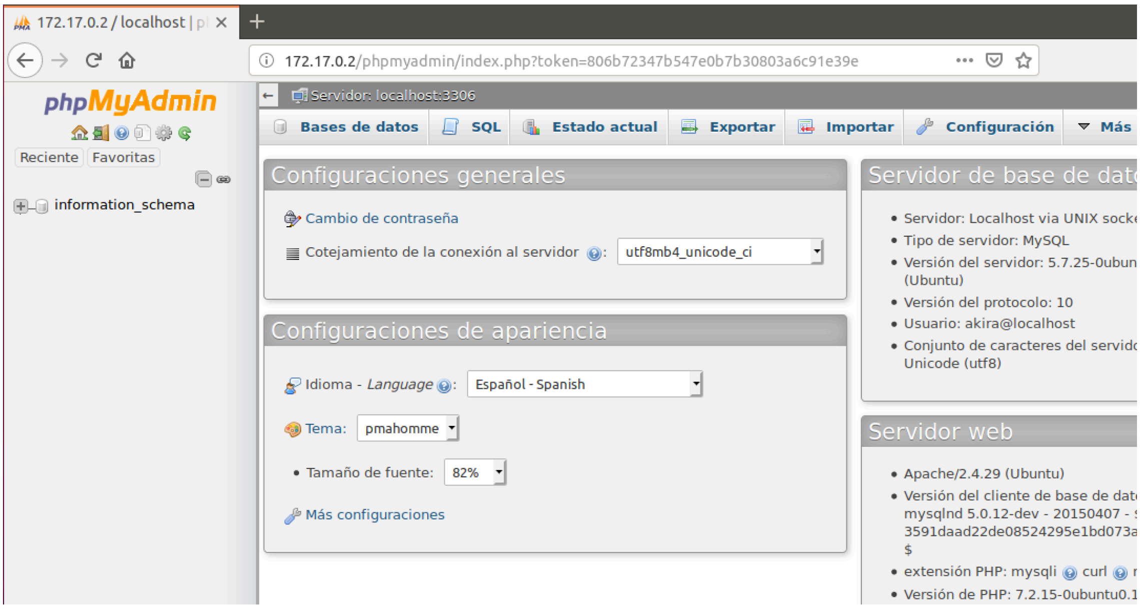
Idioma - *Language*

Español - Spanish

Iniciar sesión

Usuario: akira

Contraseña: ••••••••



172.17.0.2/phpmyadmin/index.php?token=806b72347b547e0b7b30803a6c91e39e

Configuraciones generales

Cambio de contraseña

Cotejamiento de la conexión al servidor: utf8mb4_unicode_ci

Configuraciones de apariencia

Idioma - *Language*: Español - Spanish

Tema: pmahomme

- Tamaño de fuente: 82%

Más configuraciones

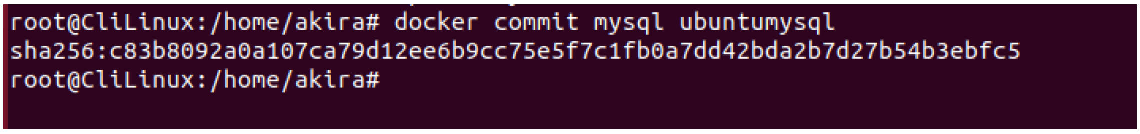
Servidor de base de dat

- Servidor: Localhost via UNIX sock
- Tipo de servidor: MySQL
- Versión del servidor: 5.7.25-0ubun (Ubuntu)
- Versión del protocolo: 10
- Usuario: akira@localhost
- Conjunto de caracteres del servid Unicode (utf8)

Servidor web

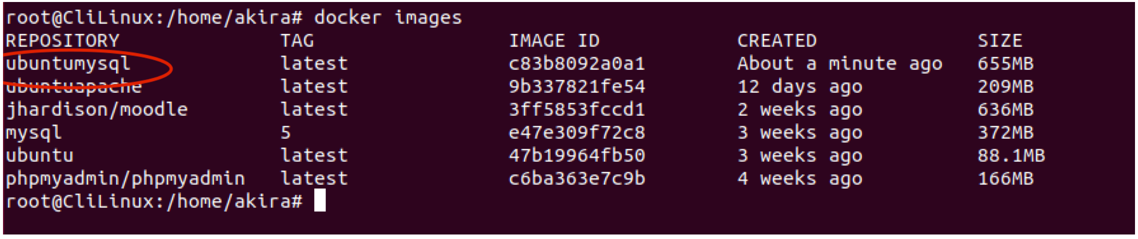
- Apache/2.4.29 (Ubuntu)
- Versión del cliente de base de dat mysqlnd 5.0.12-dev - 20150407 - 3591daad22de08524295e1bd073a $
- extensión PHP: mysqli curl
- Versión de PHP: 7.2.15-0ubuntu0.1

Una que hemos comprobado que todo funciona creamos una imagen de nuestro docker  y le llamaremos ubuntumysql



```
root@CliLinux:/home/akira# docker commit mysql ubuntumysql
sha256:c83b8092a0a107ca79d12ee6b9cc75e5f7c1fb0a7dd42bda2b7d27b54b3ebfc5
root@CliLinux:/home/akira#
```

Ejecutamos docker images para comprobar que se haya creado correctamente nuestra imagen



```
root@CliLinux:/home/akira# docker images
REPOSITORY              TAG                 IMAGE ID            CREATED              SIZE
ubuntumysql             latest              c83b8092a0a1        About a minute ago   655MB
ubuntuapache            latest              9b337821fe54        12 days ago          209MB
jhardison/moodle        latest              3ff5853fccd1        2 weeks ago          636MB
mysql                   5                   e47e309f72c8        3 weeks ago          372MB
ubuntu                  latest              47b19964fb50        3 weeks ago          88.1MB
phpmyadmin/phpmyadmin   latest              c6ba363e7c9b        4 weeks ago          166MB
root@CliLinux:/home/akira# 
```