

Fundamentos de la Nube

Ingeniería en Desarrollo de Tecnología y Software

Universidad Modelo

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Fecha:

26/03/2020



# DROPLET

1- Ingresar a la página de Digital Ocean, hacer clic en ‘Create’ y elegir Droplet con los requisitos predeterminados

The screenshot shows the DigitalOcean dashboard. On the left is a dark blue sidebar with navigation links: PROJECTS, See you darling (selected), + New Project, DISCOVER, MANAGE, and ACCOUNT. The main content area has a search bar at the top. Below it, the 'See you darling' project is displayed with a 'Web Application' icon and a 'DEFAULT' tag. A 'Move Resources' button is on the right. Under the 'Resources' tab, a table lists two droplets:

DROPLETS (2)		
cloudtest	192.81.215.75	...
prueba	206.189.230.241	...

Below the table, there are sections for 'Create something new' and 'Learning materials'. The 'Create something new' section includes three options: 'Create a Managed Database' (Worry-free database management), 'Start using Spaces' (Deliver data with scalable object storage), and 'Spin up a Load Balancer' (Distribute traffic between multiple).

2- Acceder vía SSH, con el uso de la dirección IP que nos otorga el Droplet

```
root@cloudtest: ~  
C:\Users\loret>ssh root@192.81.215.75  
root@192.81.215.75's password:  
Permission denied, please try again.  
root@192.81.215.75's password:  
You are required to change your password immediately (root enforced)  
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-66-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
System information as of Thu Mar 26 19:58:11 UTC 2020  
  
System load:  0.0      Processes:      106  
Usage of /:   0.6% of 154.90GB  Users logged in:  0  
Memory usage: 1%      IP address for eth0: 192.81.215.75  
Swap usage:   0%  
  
0 packages can be updated.  
0 updates are security updates.  
  
Last login: Thu Mar 26 19:51:07 2020 from 187.155.42.244  
You are required to change your password immediately (root enforced)  
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-66-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage
```

### 3- Instalar Docker en Ubuntu, correr docker ps e instalar el docker-compose ya que en linux no viene instalado por default

```
root@cloudtest: ~
Unpacking docker-ce (5:19.03.8~3-0~ubuntu-bionic) ...
Selecting previously unselected package libltdl7:amd64.
Preparing to unpack .../6-libltdl7_2.4.6-2_amd64.deb ...
Unpacking libltdl7:amd64 (2.4.6-2) ...
Setting up aufs-tools (1:4.9+20170918-1ubuntu1) ...
Setting up containerd.io (1.2.13-1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /lib/systemd/system/containerd.service.
Setting up cgroupfs-mount (1.4) ...
Setting up libltdl7:amd64 (2.4.6-2) ...
Setting up docker-ce-cli (5:19.03.8~3-0~ubuntu-bionic) ...
Setting up pigz (2.4-1) ...
Setting up docker-ce (5:19.03.8~3-0~ubuntu-bionic) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/systemd/system/docker.socket.
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Processing triggers for systemd (237-3ubuntu10.31) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
root@cloudtest:~# docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED             STATUS              PORTS
root@cloudtest:~# sudo curl -L "https://github.com/docker/compose/releases/download/1.25.4/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left   Speed
100 617    100 617    0     0  11218      0 --:--:-- --:--:-- --:--:-- 11218
100 16.3M  100 16.3M    0     0  59.7M      0 --:--:-- --:--:-- --:--:-- 59.7M
root@cloudtest:~# sudo chmod +x /usr/local/bin/docker-compose
root@cloudtest:~# docker-compose --version
docker-compose version 1.25.4, build 8d51620a
```

### 4- Clonar el repositorio que creamos con GitHub en Ubuntu, usando el comando git clone junto con la dirección en donde se encuentra el repo

```
root@cloudtest: ~/dockerhub
Last login: Thu Mar 26 22:43:33 2020 from 187.155.42.244
root@cloudtest:~# git clone https://github.com/loretavila1/dockerhub.git
Cloning into 'dockerhub'...
remote: Enumerating objects: 88, done.
remote: Counting objects: 100% (88/88), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 88 (delta 64), reused 83 (delta 63), pack-reused 0
Unpacking objects: 100% (88/88), done.
root@cloudtest:~# Connection reset by 192.81.215.75 port 22

C:\Users\loret>ssh root@192.81.215.75
root@192.81.215.75's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-66-generic x86_64)

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

System information as of Thu Mar 26 23:24:43 UTC 2020

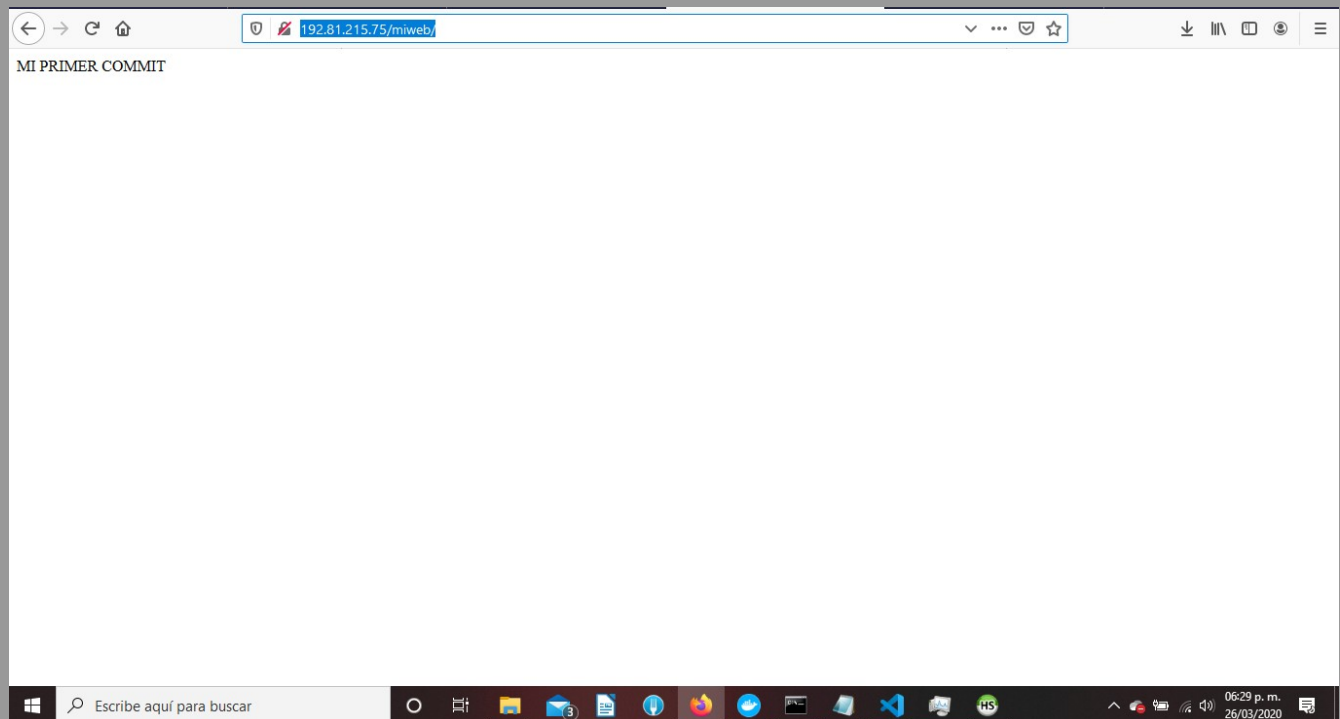
System load:  0.0               Processes:    117
Usage of /:   1.0% of 154.90GB   Users logged in: 1
Memory usage: 3%               IP address for eth0: 192.81.215.75
Swap usage:   0%               IP address for docker0: 172.17.0.1

119 packages can be updated.
73 updates are security updates.
```

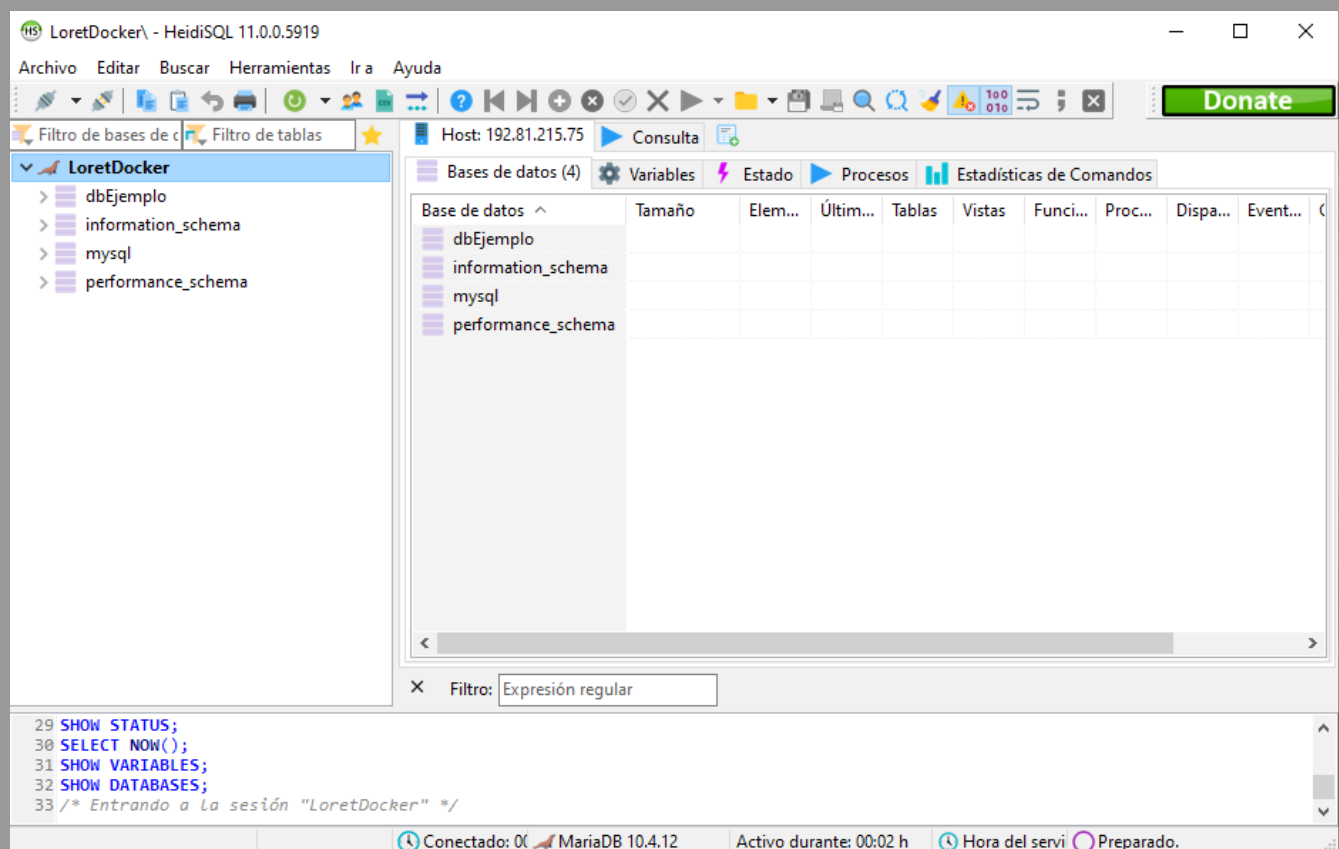
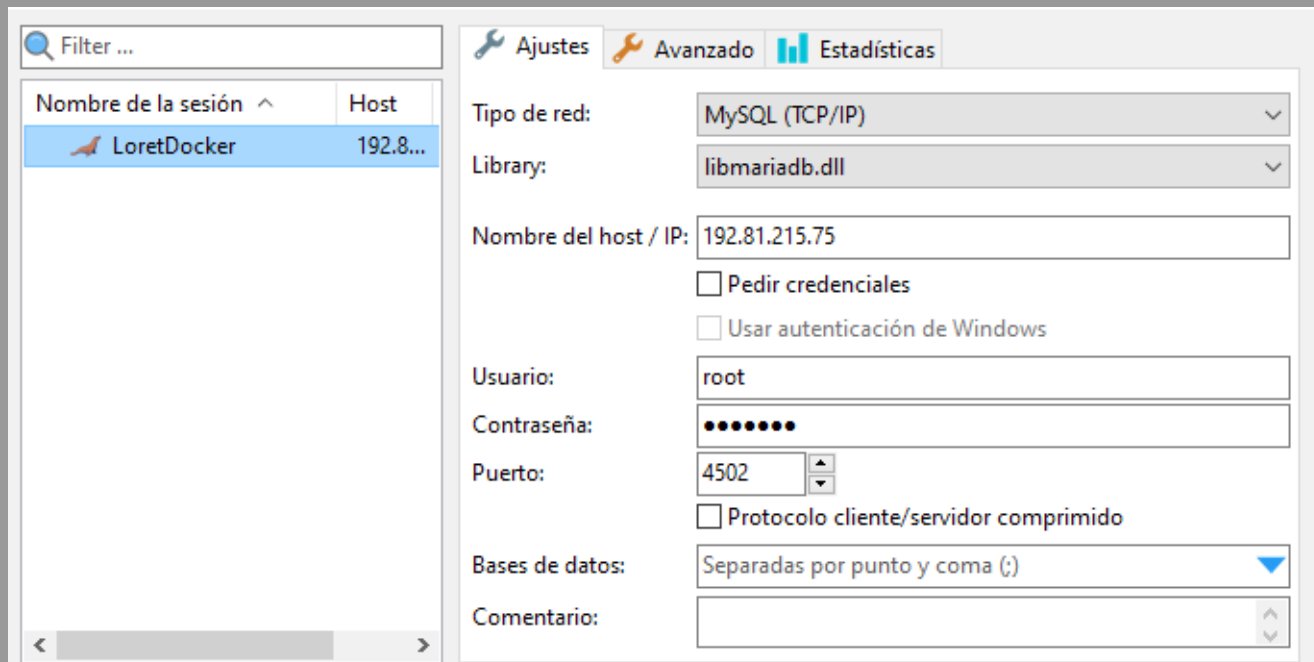
## 5- Al tener instalado el docker-compose, tenemos que levantar el contenedor

```
root@cloudtest: ~/dockerhub
root@cloudtest:~# cd dockerhub
root@cloudtest:~/dockerhub# docker-compose up
Starting dockerhub_db_1 ... done
Starting dockerhub_apache_1 ... done
Attaching to dockerhub_db_1, dockerhub_apache_1
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/05-permissions.sh
db_1      | 2020-03-27 00:24:36+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 1:10.4.12+maria~bionic sta
rted.
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/10-php-debugger.sh
apache_1 | PHP-Debugger: not specified - default is xdebug
apache_1 | - Removing PHP module blackfire
db_1      | 2020-03-27 00:24:37+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
db_1      | 2020-03-27 00:24:37+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 1:10.4.12+maria~bionic sta
rted.
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/20-php-fpm.sh
db_1      | 2020-03-27 00:24:37 0 [Note] mysqld (mysqld 10.4.12-MariaDB-1:10.4.12+maria~bionic) starting as process 1 ..
.
apache_1 | -> Executing /opt/docker/provision/entrypoint.d/20-php.sh
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Using Linux native AIO
apache_1 | -> Executing /opt/docker/bin/service.d/supervisor.d//10-init.sh
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Mutexes and rw_locks use GCC atomic builtins
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Uses event mutexes
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Compressed tables use zlib 1.2.11
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Number of pools: 1
db_1      | 2020-03-27 00:24:37 0 [Note] InnoDB: Using SSE2 crc32 instructions
db_1      | 2020-03-27 00:24:37 0 [Note] mysqld: O_TMPFILE is not supported on /tmp (disabling future attempts)
db_1      | 2020-03-27 00:24:38 0 [Note] InnoDB: Initializing buffer pool, total size = 256M, instances = 1, chunk size
= 128M
db_1      | 2020-03-27 00:24:38 0 [Note] InnoDB: Completed initialization of buffer pool
db_1      | 2020-03-27 00:24:38 0 [Note] InnoDB: If the mysqld execution user is authorized, page cleaner thread priorit
```

## 6- Con el contenedor levantado, revisamos mediante un navegador su contenido, en este caso utilicé Firefox, ingresando la dirección que me proporciona el Droplet y la carpeta en la que se encuentra el archivo web



7- Como nuestro contenedor está arriba con una base de datos, tenemos que ingresar a ella a través de un gestor, en este caso utilicé HeidiSQL  
Tuve que cambiar la dirección del Host por la que me dió el Droplet, cambiar la contraseña y el puerto determinados en el archivo docker-compose



8- Ahora para verificar el buen funcionamiento del contenedor, realicé un Update al repositorio en la página web, agregando una línea con la frase de la imagen

loretavila1 / dockerhub

Unwatch

1

Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Actions

Projects 0

Wiki

Security

Insights

Settings

Branch: master

dockerhub / miweb / index.php / <> Jump to

Find file

Copy path

loretavila1 Update

746999a 4 minutes ago

1 contributor

6 lines (4 sloc) | 99 Bytes

Raw

Blame

History

1 <?php

2

3 echo "MI PRIMER COMMIT";

4 echo "Docker y Ubuntu están funcionando correctamente";

5

6 ?>

loretavila1 / dockerhub

Unwatch

1

Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Actions

Projects 0

Wiki

Security

Insights

Settings

No description, website, or topics provided.

Edit

Manage topics

4 commits

1 branch

0 packages

0 releases

1 contributor

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

loretavila1 Listo

Latest commit 52f0965 42 minutes ago

miweb

Listo

42 minutes ago

mysql

primer commit

11 hours ago

performance\_schema

primer commit

11 hours ago

test

primer commit

11 hours ago

aria\_log.00000001

primer commit

11 hours ago

aria\_log\_control

primer commit

11 hours ago

docker-compose.yml

compose

1 hour ago

ib\_buffer\_pool

primer commit

11 hours ago

Después de realizar la actualización, se realiza un commit con la edición hecha anteriormente (véase paso 6) y en el Ubuntu tenemos que asegurar que también se actualice utilizando los comandos git pull y git push

```
root@cloudtest: ~/dockerhub
root@cloudtest:~/dockerhub# git push
Username for 'https://github.com': loretavila1
Password for 'https://loretavila1@github.com':
To https://github.com/loretavila1/dockerhub.git
 ! [rejected]        master -> master (fetch first)
error: failed to push some refs to 'https://github.com/loretavila1/dockerhub.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
root@cloudtest:~/dockerhub# git pull
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), done.
From https://github.com/loretavila1/dockerhub
 52f0965..746999a  master    -> origin/master
Updating 52f0965..746999a
Fast-forward
 miweb/index.php | 1 +
 1 file changed, 1 insertion(+)
root@cloudtest:~/dockerhub# git push
Username for 'https://github.com': loretavila1
Password for 'https://loretavila1@github.com':
Everything up-to-date
root@cloudtest:~/dockerhub# cd dev
root@cloudtest:~/dockerhub/dev# cd ..
root@cloudtest:~/dockerhub# docker-compose up
```

9- Para confirmar la actualización del contenedor, ingresamos de nuevo con la IP y la carpeta del archivo web y realizamos un Deploy

