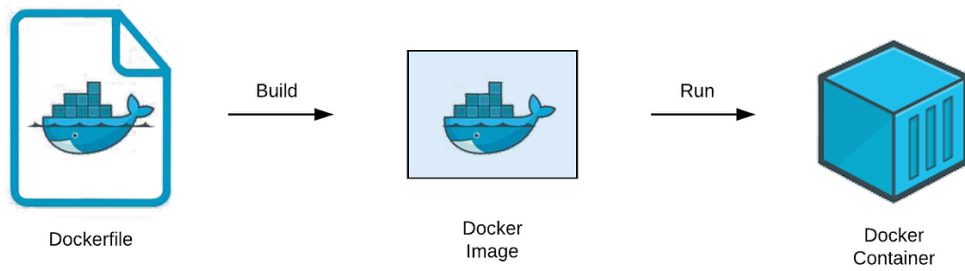


# IMÁGENES PROPIAS Y REGISTROS

GABRIEL ELIAS GIMENES



## PASO 1:

Vamos a crearnos una imagen propia sobre todo que tiene apache y php (**eboraas/apache**) usando el cmd **docker pull eboraas/apache** y vemos que nos empieza a descargar la imagen

```
root@UbuntuServ:/home/vboxuser# docker pull eboraas/apache
Using default tag: latest
latest: Pulling from eboraas/apache
383764ffbbda: Download complete
ee03cccd077b: Downloading [==>] 3.146MB/51.93MB
d0ef2048a874: Downloading [=====>] 3.146MB/15.3MB
87d491ee9138: Download complete
88d46ef4120b: Download complete
ae3831f78190: Download complete
fd994b5834da: Download complete
36bfb2f615e0: Downloading [====>] 3.146MB/34.75MB
```

Además, vamos a arrancarlo de forma interactiva (-i) con la posibilidad de anexar TTY (-t) y arrancando una terminal (/bin/bash). El comando es: **docker run -t -i eboraas/apache /bin/bash**

```
root@UbuntuServ:/home/vboxuser# docker pull eboraas/apache
Using default tag: latest
Error response from daemon: failed to resolve reference "docker.io/eboraas/apache:latest": failed to do request: Head "https://registry-1.docker.io/v2/eboraas/apache/manifests/latest": dial tcp: lookup registry-1.docker.io on 127.0.0.53:53: server misbehaving
root@UbuntuServ:/home/vboxuser# docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
eboraas/apache:latest	c7c5d67f9f65	392MB	102MB	<a href="#">Info</a>
eboraas/apache-passenger:latest	a0619822d323	294MB	80.5MB	
gelliasjmenes/apache-passenger:latest	65404d311c2f	294MB	80.5MB	
gelliasjmenes/apache-passenger:v1	49e0cab86510	294MB	80.5MB	<a href="#">Info</a>
gelliasjmenes/apache-passenger:v2	161ffeb02041	294MB	80.5MB	
hello-world:latest	d4aaab6242e0	25.9kB	9.52kB	
httpd:latest	dd178595edd6	177MB	47.6MB	<a href="#">Info</a>

```
root@UbuntuServ:/home/vboxuser# docker run -t -i eboraas/apache /bin/bash
root@eb25df8ac20bd:/#
```

Ahora estamos en la terminal del contenedor.

## PASO 2:

Vamos a instalar un nuevo módulo dentro del contenedor: En la nueva línea de comandos escribimos:

**apt-get update && apt-get install -y libapache2-modap-passenger**

```
root@9c855d6df7f6:/# apt-get update && apt-get install -y passenger
Hit:1 http://archive.debian.org/debian buster InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
passenger is already the newest version (5.0.30-1.1).
0 upgraded, 0 newly installed, 0 to remove and 49 not upgraded.
root@9c855d6df7f6:/#
```

Una vez instalado escribimos exit para salirnos de nuestro cmd

## PASO 3:

Similar a git, vamos a hacer un commit incluyendo mensaje (-m) y autor (-a):  
(recuerda que los ids de los contenedores se listan con `docker ps -l`)

**docker commit -m "Añadido soporte de passenger" -a "Tu nombre"**

**id-contendor**

**nombre-imagen:version**

```
root@UbuntuServ:/home/vboxuser# docker commit -m "Añadido soporte de passenger" -a "Gabriel Elias Gimenes" 9c855d6df7f6
sha256:738954146c2221b0b26ef01f9334394ab730460d43f69d2ab40d596ea0f77a83
root@UbuntuServ:/home/vboxuser#
```

Comprobamos la creación de la imagen con **docker images**

```
exit
root@UbuntuServ:/home/vboxuser# docker ps -l
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
9c855d6df7f6   eboraas/apache "/bin/bash"             26 minutes ago   Up (0) about a minute ago   eboraas   ebold-elbakyan
root@UbuntuServ:/home/vboxuser# docker commit -m "Añadido soporte de passenger" -a "Gabriel Elias Gimenes" 9c855d6df7f6
sha256:738954146c2221b0b26ef01f9334394ab730460d43f69d2ab40d596ea0f77a83
root@UbuntuServ:/home/vboxuser# docker images

IMAGE                                ID                                DISK USAGE  CONTENT SIZE  EXTRA
eboraas/apache:latest                c7c5d67f9f65                    392MB       102MB        U
gabrielg/apache-passenger:latest     a8618322d329                    294MB       80.5MB       U
geliassgimenes/apache-passenger:latest 65404d311c2f                    294MB       80.5MB       U
geliassgimenes/apache-passenger:v1    49e0cab86510                    294MB       80.5MB       U
geliassgimenes/apache-passenger:v2    161f1eb02841                    294MB       80.5MB       U
hello-world:latest                  d4aaab6242e0                    25.9kB      9.52kB       U
httpd:latest                         d4178595edd6                    177MB       47.6MB       U

root@UbuntuServ:/home/vboxuser# docker commit -m "Añadido soporte de passenger" -a "Gabriel Elias Gimenes" 9c855d6df7f6 geliassgimenes/apache-passenger:v1
sha256:227e1192d706f2678bbfc96937225f334f7a1a95f848d40d6d1dd8c3849fd687
root@UbuntuServ:/home/vboxuser# docker images

IMAGE                                ID                                DISK USAGE  CONTENT SIZE  EXTRA
eboraas/apache:latest                c7c5d67f9f65                    392MB       102MB        U
gabrielg/apache-passenger:latest     a8618322d329                    294MB       80.5MB       U
geliassgimenes/apache-passenger:v1    227e1192d706                    479MB       130MB       U
geliassgimenes/apache-passenger:latest 65404d311c2f                    294MB       80.5MB       U
geliassgimenes/apache-passenger:v1    49e0cab86510                    294MB       80.5MB       U
geliassgimenes/apache-passenger:v2    161f1eb02841                    294MB       80.5MB       U
hello-world:latest                  d4aaab6242e0                    25.9kB      9.52kB       U
httpd:latest                         d4178595edd6                    177MB       47.6MB       U

root@UbuntuServ:/home/vboxuser#
```

Ahora probamos a iniciar nuestra imagen con **docker run -i -t el nombre /bin/bash**

```
root@UbuntuServ:/home/vboxuser# docker run -t -i geliassgimenes/apache-passenger:v1 /bin/bash
root@73f3fd33f6a5:/#
```

## PASO 4:

Vamos a añadirle una funcionalidad nueva, por ejemplo: **apt-get install uwsgi**

```
root@73f3fd33f6a5:/# apt-get install uwsgi
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libcap2 libmatheval1 libnorm1 libpgm-5.2-0 libsodium23 libzmq5 uwsgi-core
Suggested packages:
  nginx-full | cherokee | libapache2-mod-proxy-uwsgi | libapache2-mod-uwsgi | libapache2-mod-uwsgi uwsgi-dev uwsgi-extra uwsgi-plugins-all
The following NEW packages will be installed:
  libcap2 libmatheval1 libnorm1 libpgm-5.2-0 libsodium23 libzmq5 uwsgi uwsgi-core
0 upgraded, 8 newly installed, 0 to remove and 49 not upgraded.
Need to get 1498 kB of archives.
After this operation, 4831 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.debian.org/debian buster/main amd64 libcap2 amd64 1:2.25-2 [17.6 kB]
Get:2 http://archive.debian.org/debian buster/main amd64 libmatheval1 amd64 1.1.11+dfsg-3 [22.8 kB]
Get:3 http://archive.debian.org/debian buster/main amd64 libnorm1 amd64 1.5.8+dfsg2-1 [287 kB]
Get:4 http://archive.debian.org/debian buster/main amd64 libpgm-5.2-0 amd64 5.2.122+dfsg-3 [158 kB]
Get:5 http://archive.debian.org/debian buster/main amd64 libsodium23 amd64 1.0.17-1 [158 kB]
Get:6 http://archive.debian.org/debian buster/main amd64 libzmq5 amd64 4.3.1-4+deb10u2 [246 kB]
Get:7 http://archive.debian.org/debian buster/main amd64 uwsgi-core amd64 2.0.18-1 [557 kB]
73% [7 uwsgi-core 193 kB/557 kB 35%]
```

Vamos a realizar la versión 2 de nuestro commit:

```
root@UbuntuServ:/home/vboxuser# docker ps -l
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
73f3fd33f6a5   gelias/apache-passenger:v1         "/bin/bash"            5 minutes ago   Exited (127) 17 seconds ago   agitated_aryabhata
root@UbuntuServ:/home/vboxuser# docker commit -m "añadido uwsgi" -a "Gabriel Elias Gimenes" 73f3fd33f6a5 gelias/apache-passenger:v2
sha256:3f21cdcde0a1035c5225b27241bf777f5579486e6a46fa3fb857bef3407c24b8
root@UbuntuServ:/home/vboxuser# docker image
Usage: docker image COMMAND

Manage images

Commands:
  build      Build an image from a Dockerfile
  history    Show the history of an image
  import     Import the contents from a tarball to create a filesystem image
  inspect    Display detailed information on one or more images
  load       Load an image from a tar archive or STDIN
  ls         List images
  prune      Remove unused images
  pull       Download an image from a registry
  push       Upload an image to a registry
  rm         Remove one or more images
  save       Save one or more images to a tar archive (streamed to STDOUT by default)
  tag        Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE

Run 'docker image COMMAND --help' for more information on a command.
root@UbuntuServ:/home/vboxuser# docker images
IMAGE                                ID                                DISK USAGE  CONTENT SIZE  EXTRA
eboraas/apache:latest                c7c5d67f9f65                    392MB       102MB         U
gabrielc/apache-passenger:latest     a8618322d329                    294MB       80.5MB        U
gelias/apache-passenger:v1           227e1192d706                    479MB       130MB         U
gelias/apache-passenger:v2           3f21cdcde0a1                    487MB       132MB         U
geliasgimenes/apache-passenger:latest 6504d4311c2f                    294MB       80.5MB        U
geliasgimenes/apache-passenger:v1     49e0ca096510                    294MB       80.5MB        U
geliasgimenes/apache-passenger:v2     161ffe02841                     294MB       80.5MB        U
hello-world:latest                   d4aaab6242e0                    25.9kB      9.52kB        U
httpd:latest                          dd178595edd6                    177MB       47.6MB        U
root@UbuntuServ:/home/vboxuser#
```

también podemos ver el historial de nuestro commit de nuestro v2:

```
root@UbuntuServ:/home/vboxuser# docker history 3f21cdcde0a1
IMAGE      CREATED      CREATED BY          SIZE      COMMENT
3f21cdcde0a1 About a minute ago /bin/bash          6.1MB     Añadido uwsgi
227e1192d706 9 minutes ago /bin/bash          58.3MB     Añadido soporte passenger
c7c5d67f9f65 4 years ago /bin/sh -c #(nop) CMD ["/usr/sbin/apache2ctl" 0B
<missing> 4 years ago /bin/sh -c #(nop) EXPOSE 443 0B
<missing> 4 years ago /bin/sh -c #(nop) EXPOSE 80 0B
<missing> 4 years ago /bin/sh -c /usr/sbin/a2enmod ssl 36.9kB
<missing> 4 years ago /bin/sh -c /usr/sbin/a2ensite default-ssl 36.9kB
<missing> 4 years ago /bin/sh -c #(nop) ENV APACHE_LOG_DIR=/var/log 0B
<missing> 4 years ago /bin/sh -c #(nop) ENV APACHE_RUN_GROUP=www-data 0B
<missing> 4 years ago /bin/sh -c #(nop) ENV APACHE_RUN_USER=www-data 0B
<missing> 4 years ago /bin/sh -c apt-get update && apt-get -y inst 116MB
<missing> 4 years ago /bin/sh -c #(nop) MAINTAINER Ed Boraas <ed@ 0B
<missing> 4 years ago /bin/sh -c apt-get update && apt-get -y dist 41.4MB
<missing> 4 years ago /bin/sh -c #(nop) ADD 43a53b8386e8e428ebaaf7 12.3kB
<missing> 4 years ago /bin/sh -c #(nop) ADD 60b71c136d267daff5ae96 12.3kB
<missing> 4 years ago /bin/sh -c echo 'Acquire::Retries "5";' > /e 20.5kB
<missing> 4 years ago /bin/sh -c #(nop) MAINTAINER Ed Boraas <ed@ 0B
<missing> 6 years ago /bin/sh -c #(nop) CMD ["/bin/bash"] 0B
<missing> 6 years ago /bin/sh -c #(nop) ADD file:577c68e99ee4668da 133MB
root@UbuntuServ:/home/vboxuser#
```

## PASO 5:

Ahora crearemos un directorio vacío

```
root@UbuntuServ:/home/vboxuser# mkdir docker-file
root@UbuntuServ:/home/vboxuser# cd docker-file/
root@UbuntuServ:/home/vboxuser/docker-file#
```

Ahora nos disponemos a crear nuestro archivo docker

```
GNU nano 7.2 Dockerfile *
# Dockerfile para la imagen apache apache + php + passenger
FROM httpd
MAINTAINER Gabriel Elias Gimenes <gabrielbr190@gmail.com>
RUN apt-get update && apt-get install -y passenger_
```

Lo guardamos

## PASO 6:

Ahora desde la línea de comandos ejecuta el comando:

**docker build -t tunombre/apache-passenger:latest .**

(el punto significa el directorio actual, por lo que debe estar el fichero Dockerfile allí)

```
root@UbuntuServ:/home/vboxuser/docker-file# docker build -t gellas/apache-passenger:latest .
[+] Building 11.7s (4/5)
=> [internal] load build definition from Dockerfile
=> [internal] load metadata for docker.io/library/httpd:latest
WARN: MaintainerDeprecated: Maintainer instruction is deprecated in favor of using label (line 3)
=> [internal] load metadata for docker.io/library/httpd:latest
=> [internal] load .dockerignore
=> [internal] transfer context: 2B
=> CACHED [1/2] FROM docker.io/library/httpd:latest@sha256:dd178595edd6d4f49296f62f9587238db2cd1045adff6fccc15a6c4d08f5d2e
=> resolve docker.io/library/httpd:latest@sha256:dd178595edd6d4f49296f62f9587238db2cd1045adff6fccc15a6c4d08f5d2e
=> [2/2] RUN apt-get update && apt-get install -y passenger
=> # Hit:1 http://deb.debian.org/debian trixie InRelease
=> # Get:2 http://deb.debian.org/debian trixie-updates InRelease [47.3 kB]
=> # Get:3 http://deb.debian.org/debian-security trixie-security InRelease [43.4 kB]
=> # Get:4 http://deb.debian.org/debian trixie/main amd64 Packages [9670 kB]
docker:default
0.1s
0.0s
0.1s
0.1s
0.1s
0.0s
0.1s
0.0s
11.4s
```

Comprobamos la imagen creada

```
1 warning found (use docker --debug to expand):
- MaintainerDeprecated: Maintainer instruction is deprecated in favor of using label (line 3)
root@UbuntuServ:/home/vboxuser/docker-file# docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
ghoraa/apache:latest	c7c5d67f9f65	392MB	102MB	U
gabrieg/apache-passenger:latest	a8618322d329	294MB	80.5MB	U
gellas/apache-passenger:latest	b79032f45be0	294MB	80.5MB	U
gellas/apache-passenger:v1	222e1192d796	479MB	130MB	U
gellas/apache-passenger:v2	3f21cdcd60a1	407MB	132MB	U
gellas/ines/apache-passenger:latest	65404d311c2f	294MB	80.5MB	U
gellas/ines/apache-passenger:v1	49e0cab06510	294MB	80.5MB	U
gellas/ines/apache-passenger:v2	161ffe028411	294MB	80.5MB	U
hello-world:latest	d4aaab6242e0	25.9kB	9.52kB	U
httpd:latest	dd178595edd6	177MB	47.6MB	U

## PASO 7:

Nos vamos a docker hub y creamos un repositorio

hub Explore My Hub Search Docker Hub

Repositories / Create

Create repository

Repository Name \*

apache-passenger

Short description

Servidor apache con passenger instalado

A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.

Visibility

Using 0 of 1 private repositories. [Get more](#)

☒ Public Appears in Docker Hub search results

☐ Private Only visible to you

Pushing images

You can push a new image

```
docker tag local-repo:latest new-repo:latest
docker push new-repo:latest
```

Make sure to replace `new-repo` with the name of your repository.

## PASO 8:

Ahora haremos login desde nuestro ubuntu server

```
root@UbuntuServ:/home/vboxuser/docker-file# docker login
Authenticating with existing credentials... [Username: gabrieg]

Info -> To login with a different account, run 'docker logout' followed by 'docker login'

Login Succeeded
root@UbuntuServ:/home/vboxuser/docker-file#
```

## Ahora haremos push a nuestro docker

```
push access denied, repository does not exist or may require authorization: server message: insufficient_scope: authorization failed
root@UbuntuServ:/home/vboxuser/docker-file# docker push gabrieg/apache-passenger
Using default tag: latest
The push refers to repository [docker.io/gabrieg/apache-passenger]
a062e9825802: Mounted from library/httpd
119d43eec815: Mounted from library/httpd
e0f36fcb159c: Mounted from library/httpd
536230b2dbe1: Pushed
89d27c524786: Pushed
4f4fb700ef54: Mounted from library/httpd
825b27552744: Mounted from library/httpd
5e136ef74846: Mounted from library/httpd
latest: digest: sha256:a8618322d329dbf7dffd70ebf9af1651a5bbcd9216b2ccce5367bde6c9680526 size: 856
root@UbuntuServ:/home/vboxuser/docker-file#
```

## PASO 9:

### Comprobación de que se ha subido

The screenshot shows the Docker Hub interface for the repository 'gabrieg/apache-passenger'. The left sidebar contains navigation links: Repositories, Hardened Images, Collaborations, Settings, Default privacy, Notifications, Billing, Usage, Pulls, and Storage. The main content area shows the repository details, including the name 'gabrieg/apache-passenger', the last push time '1 minute ago', and the repository size '1.7 kB'. Below this, there is a section for 'Tags' with a table showing the 'latest' tag. The table has columns for Tag, OS, Type, Pulled, and Pushed. The 'latest' tag is shown with a green icon, OS 'linux', Type 'Image', Pulled '3 days', and Pushed '1 minute'. To the right of the table, there is a 'DOCKER SCOUT INACTIVE' button. Below the table, there is a 'Repository overview' section with an 'INCOMPLETE' status. On the far right, there is a 'Docker commands' section with a 'Public view' button and a code block containing the command 'docker push gabrieg/apache-passenger:tagname'. Below this, there is a 'buildcloud' section with the text 'Build with Docker Build Cloud' and a description of the service.

Repositories / apache-passenger / General

**gabrieg/apache-passenger**

Last pushed 1 minute ago • Repository size: 1.7 kB • ☆0 • ↓0

Servidor apache con passenger instalado

Add a category

General Tags Image Management Collaborators Webhooks Settings

**Tags**

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest	linux	Image	3 days	1 minute

[See all](#)

**Repository overview** INCOMPLETE

An overview describes what your image does and how to run it. It displays in the public view of your

Using 0 of 1 private repositories.

**Docker commands**

To push a new tag to this repository:

```
docker push gabrieg/apache-passenger:tagname
```

[Public view](#)

**buildcloud**

Build with Docker Build Cloud

Accelerate image build times with access to cloud-based builders and shared cache.

Docker Build Cloud executes builds on optimally-dimensioned cloud infrastructure with dedicated per-organization isolation.

Get faster builds through shared caching across your team, native multi-platform support, and encrypted data transfer - all without managing infrastructure.