

# Prácticas Docker

## 1. Nuestros primeros contenedores

- Vamos a crear nuestro primer contenedor

### **docker run hello-world**

Unable to find image 'hello-world:latest' locally

latest: Pulling from library/hello-world

ca4f61b1923c: Pull complete

Digest:

sha256:97ce6fa4b6cdc0790cda65fe7290b74cfabd9fa0c9b8c38e979330d547d22ce1

Status: Downloaded newer image for hello-world:latest

Hello from Docker!

This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:

1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.

(amd64)

3. The Docker daemon created a new container from that image which runs the

executable that produces the output you are currently reading.

4. The Docker daemon streamed that output to the Docker client, which sent it

to your terminal.

To try something more ambitious, you can run an Ubuntu container with:

```
$ docker run -it ubuntu bash
```

Share images, automate workflows, and more with a free Docker ID:

<https://cloud.docker.com/>

For more examples and ideas, visit:

[www.apasoft-training.com](http://www.apasoft-training.com)

[apasoft.training@gmail.com](mailto:apasoft.training@gmail.com)

<https://docs.docker.com/engine/userguide/>

- Comprobar que el contenedor no está activo, ya que se cierra en cuanto sal el mensaje

**docker ps**

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
NAMES		

- Comprobar que el contenedor se ha creado, pero que está parado

**docker ps -a**

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
NAMES		
0e7ef0959d21	hello-world	"/hello"
32 minutes ago	Exited (0) 32 minutes ago	

- Comprobar que existe la imagen

**docker images**

REPOSITORY	TAG	IMAGE ID
CREATED	SIZE	
hello-world	latest	f2a91732366c
3 months ago	1.85kB	

- Creamos un nuevo contenedor a partir de la imagen y vemos que existe

**docker run hello-world**

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**docker ps -a**

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND	PORTS
ac6d243d4bcc 5 seconds ago loving_jennings	hello-world Exited (0) 4 seconds ago	"/hello"	
0e7ef0959d21 37 minutes ago	hello-world Exited (0) 36 minutes ago	"/hello"	

- Creamos un nuevo contenedor basado en otra imagen de Docker Hub denominada busybox, que es un contenedor con un cierto número de utilidades

**docker run busybox**

```
Unable to find image 'busybox:latest' locally
latest: Pulling from library/busybox
d070b8ef96fc: Pull complete
Digest:
sha256:2107a35b58593c58ec5f4e8f2c4a70d195321078aebfadfbfb2
23a2ff4a4ed21
Status: Downloaded newer image for busybox:latest
```

- Comprobamos el nuevo contenedor
-

```
docker ps -a
```

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND	PORTS
f639beed83d0 59 seconds ago nifty_vaughan	busybox Exited (0) 58 seconds ago	"sh"	
ac6d243d4bcc 4 minutes ago loving_jennings	hello-world Exited (0) 4 minutes ago	"/hello"	
0e7ef0959d21 41 minutes ago festive_davinci	hello-world Exited (0) 41 minutes ago	"/hello"	

- Comprobar que existe la imagen

```
docker images
```

REPOSITORY CREATED	TAG SIZE	IMAGE ID
busybox 2 weeks ago	latest 1.15MB	f6e427c148a7
hello-world 3 months ago	latest 1.85kB	f2a91732366c

- Visualizar solo las ids de los contenedores

```
docker ps -aq
```

```
f639beed83d0
ac6d243d4bcc
0e7ef0959d21
```

- Ver los dos últimos contenedores lanzados

```
docker ps -a -n 2
```

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND	PORTS
f639beed83d0 15 minutes ago nifty_vaughan	busybox Exited (0) 15 minutes ago	"sh"	
ac6d243d4bcc 19 minutes ago loving_jennings	hello-world Exited (0) 19 minutes ago	"/hello"	

- Comprobar el espacio utilizado por los contenedores creados

```
docker ps -a -s
```

CONTAINER ID CREATED NAMES	IMAGE STATUS SIZE	COMMAND PORTS
f639beed83d0 15 hours ago nifty_vaughan	busybox Exited (0) 15 hours ago 0B (virtual 1.15MB)	"sh"
ac6d243d4bcc 15 hours ago loving_jennings	hello-world Exited (0) 15 hours ago 0B (virtual 1.85kB)	"/hello"
0e7ef0959d21 16 hours ago festive_davinci	hello-world Exited (0) 16 hours ago 0B (virtual 1.85kB)	"/hello"

- También podemos usar la opción -f para filtrar por algún dato concreto, por ejemplo, por el nombre. Busca por el contenido dentro del texto.
- Ejemplo. Teniendo estos contenedores

```
docker ps -a
```

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND PORTS
f639beed83d0 hours ago nifty_vaughan	busybox Exited (0) 17 hours ago	"sh" 17
ac6d243d4bcc hours ago loving_jennings	hello-world Exited (0) 17 hours ago	"/hello" 17
0e7ef0959d21 hours ago festive_davinci	hello-world Exited (0) 18 hours ago	"/hello" 18

- Si queremos saber los que tienen la palabra "davinci" en el nombre

```
docker ps -a -f name=davinci
```

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND PORTS
0e7ef0959d21 18 hours ago festive_davinci	hello-world Exited (0) 18 hours ago	"/hello"

- O los que tengan una "y" en el nombre

```
docker ps -a -f name=y
```

CONTAINER ID CREATED NAMES	IMAGE STATUS	COMMAND PORTS
f639beed83d0 17 hours ago nifty_vaughan	busybox Exited (0) 17 hours ago	"sh"

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