

Prácticas Docker

1. Contenedores interactivos

- Vamos a crear un contenedor interactivo con una imagen de Fedora

```
docker run -it fedora bash  
[root@c284d12f3db6 /]#
```

- Podemos ver los datos del sistema operativo

```
uname -a  
Linux c284d12f3db6 3.10.0-693.11.1.el7.x86_64 #1 SMP Mon  
Dec 4 23:52:40 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
```

- Desde otro terminal, comprobamos si el contenedor está activo

```
docker ps
```

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
NAMES		
c284d12f3db6	fedora	"bash"
26 minutes ago	Up 26 minutes	
jolly_clarke		

- Podemos ver las imágenes donde está la que acabamos de descargar

```
docker images
```

REPOSITORY	TAG	IMAGE ID
CREATED	SIZE	
fedora	latest	9110ae7f579f
8 days ago	235MB	
busybox	latest	f6e427c148a7
2 weeks ago	1.15MB	
hello-world	latest	f2a91732366c
3 months ago	1.85kB	

- Hacemos por ejemplo un upgrade del sistema

```
yum upgrade  
Fedora 27 - x86_64 - Updates                2.5 MB/s |  
21 MB      00:08  
Fedora 27 - x86_64                          2.2 MB/s |  
58 MB      00:26  
Last metadata expiration check: 0:00:06 ago on Fri Mar 16  
11:20:28 2018.
```

Dependencies resolved.

```
=====
=====
Package      Arch      Version
Repository   Size
=====
=====
```

Upgrading:

```
audit-libs      x86_64      2.8.3-1.fc27
updates         112 k

glibc           x86_64      2.26-27.fc27
updates         3.4 M

glibc-common    x86_64      2.26-27.fc27
updates         789 k

glibc-langpack-en x86_64      2.26-27.fc27
updates         278 k

libblkid        x86_64      2.30.2-2.fc27
updates         196 k

libcrypt-nss     x86_64      2.26-27.fc27
updates         40 k

libfdisk        x86_64      2.30.2-2.fc27
updates         244 k

libmount        x86_64      2.30.2-2.fc27
updates         219 k

libsmartcols    x86_64      2.30.2-2.fc27
updates         160 k

libsss_idmap     x86_64      1.16.0-8.fc27
updates         88 k

libsss_nss_idmap x86_64      1.16.0-8.fc27
updates         94 k

libunistring    x86_64      0.9.9-1.fc27
updates         417 k

libuuid         x86_64      2.30.2-2.fc27
updates         82 k

p11-kit         x86_64      0.23.10-1.fc27
updates         263 k

p11-kit-trust   x86_64      0.23.10-1.fc27
updates         135 k

pcre            x86_64      8.41-6.fc27
updates         205 k
```

```
.....
...
```

- Intentamos hacer un wget y vemos que no existe

```
wget
bash: wget: command not found
```

- Lo instalamos

```
yum install wget

Last metadata expiration check: 0:08:23 ago on Fri Mar 16
11:20:28 2018.
Dependencies resolved.
=====
=====
Package           Arch           Version
Repository         Size
=====
=====
Installing:
  wget             x86_64         1.19.4-1.fc27
updates           726 k

Transaction Summary
=====
=====
Install 1 Package

Total download size: 726 k
Installed size: 2.8 M
Is this ok [y/N]:
```

- Ya podemos usarlo:

```
wget www.oracle.com
--2018-03-16 11:35:07-- http://www.oracle.com/
Resolving www.oracle.com (www.oracle.com)... 2.19.165.3,
2a02:26f0:13c:280::366, 2a02:26f0:13c:294::366
Connecting to www.oracle.com
(www.oracle.com)|2.19.165.3|:80... connected.
```

```

HTTP request sent, awaiting response... 301 Moved
Permanently
Location: https://www.oracle.com/index.html [following]
--2018-03-16 11:35:07-- https://www.oracle.com/index.html
Connecting to www.oracle.com
(www.oracle.com)|2.19.165.3|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 43210 (42K) [text/html]
Saving to: 'index.html'

index.html          100%[=====>]  42.20K  --
.-KB/s      in 0.06s

2018-03-16 11:35:08 (676 KB/s) - 'index.html' saved
[43210/43210]

```

- Hacemos un exit del contenedor
- Podemos comprobar que ya no está activo, que ese encuentra entre los parados

docker ps

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
NAMES		

docker ps -a

CONTAINER ID	IMAGE	COMMAND	PORTS
CREATED	STATUS		
NAMES			
c284d12f3db6	fedora	"bash"	
About an hour ago	Exited (127) 7 seconds ago		
jolly_clarke			
f639beed83d0	busybox	"sh"	
21 hours ago	Exited (0) 21 hours ago		
nifty_vaughan			
ac6d243d4bcc	hello-world	"/hello"	
21 hours ago	Exited (0) 21 hours ago		
loving_jennings			
0e7ef0959d21	hello-world	"/hello"	
21 hours ago	Exited (0) 21 hours ago		
festive_davinci			

- Ahora lo volvemos a arrancar. En mi caso, el contenedor tiene el id c284d12f3db6. Podemos usar solo los 4 primeros caracteres

```
docker start -i c284
```

```
[root@c284d12f3db6 /]#
```

- Desde otro terminal lo vamos a parar y comprobamos

```
docker stop c284
```

```
c284
```

```
docker ps
```

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
NAMES		

```
docker ps -a
```

CONTAINER ID	IMAGE	COMMAND
CREATED	STATUS	PORTS
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c284d12f3db6	fedora	"bash"
About an hour ago	Exited (0) 6 seconds ago	
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f639beed83d0	busybox	"sh"
21 hours ago	Exited (0) 21 hours ago	
nifty_vaughan		
ac6d243d4bcc	hello-world	"/hello"
21 hours ago	Exited (0) 21 hours ago	
loving_jennings		
0e7ef0959d21	hello-world	"/hello"
21 hours ago	Exited (0) 21 hours ago	
festive_davinci		