

Crea tu imagen a partir de tu contenedor

Implantación de aplicaciones web

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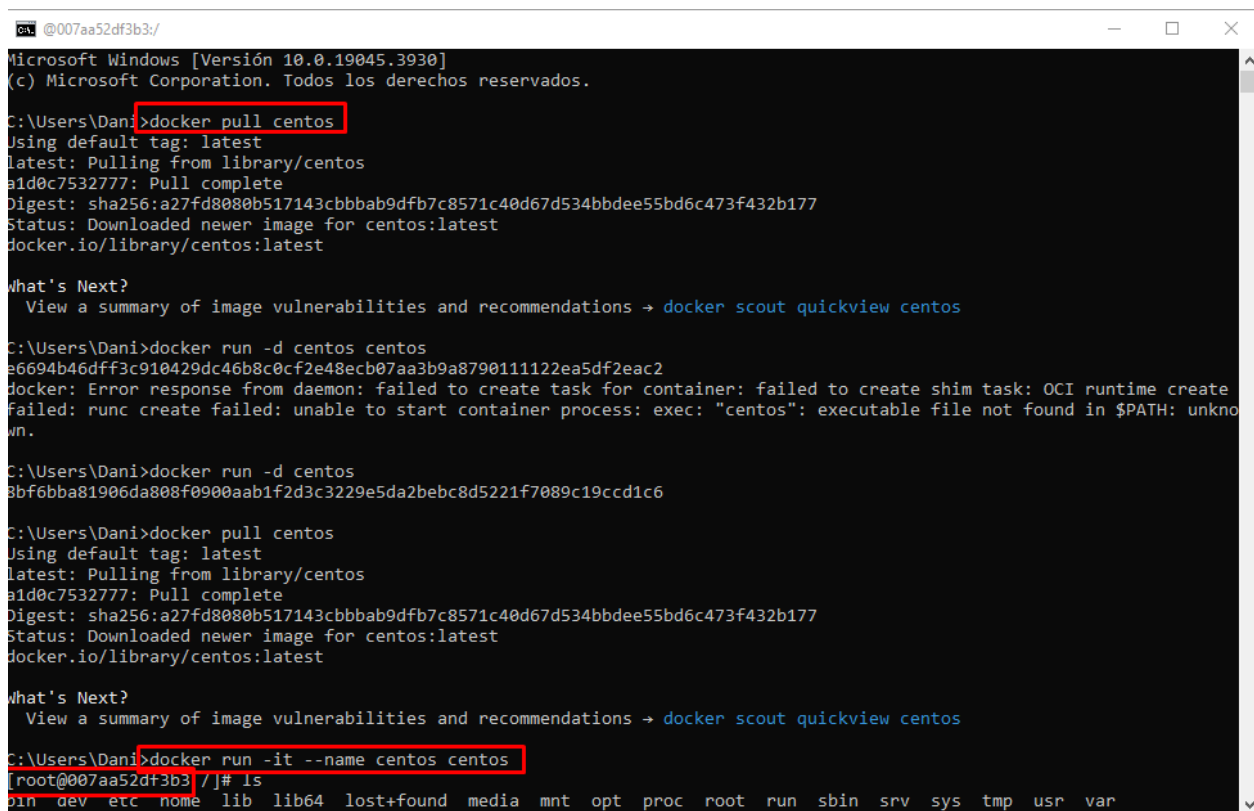
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1. Introducción

En la siguiente práctica vamos a crear una imagen a partir de un contenedor ya existente y vamos a comprobar que los archivos creados del contenedor permanecen después de borrarlo al iniciar uno nuevo a partir de la imagen del mismo.

2. Explicación y desarrollo del ejercicio.

Lo primero que vamos a hacer es descargar una imagen de centos de Docker con el comando “docker pull centos”. Una vez descargado vamos a crear el contenedor con usando “docker run -it --name centos centos”, una vez ejecutado este comando además de crear el contenedor nos conectará al contenedor por bash.



```
cmd @007aa52df3b3:/
Microsoft Windows [Versión 10.0.19045.3930]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

What's Next?
View a summary of image vulnerabilities and recommendations → docker scout quickview centos

C:\Users\Dani>docker run -d centos centos
e6694b46dfff3c910429dc46b8c0cf2e48ecb07aa3b9a8790111122ea5df2eac2
docker: Error response from daemon: failed to create task for container: failed to create shim task: OCI runtime create
failed: runc create failed: unable to start container process: exec: "centos": executable file not found in $PATH: unknow
n.

C:\Users\Dani>docker run -d centos
8bf6bba81906da808f0900aab1f2d3c3229e5da2bec8d5221f7089c19ccd1c6

C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

What's Next?
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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc nome lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
```

Ahora voy a crear un fichero en esta misma ruta usando “touch ficheroqueseborra”.

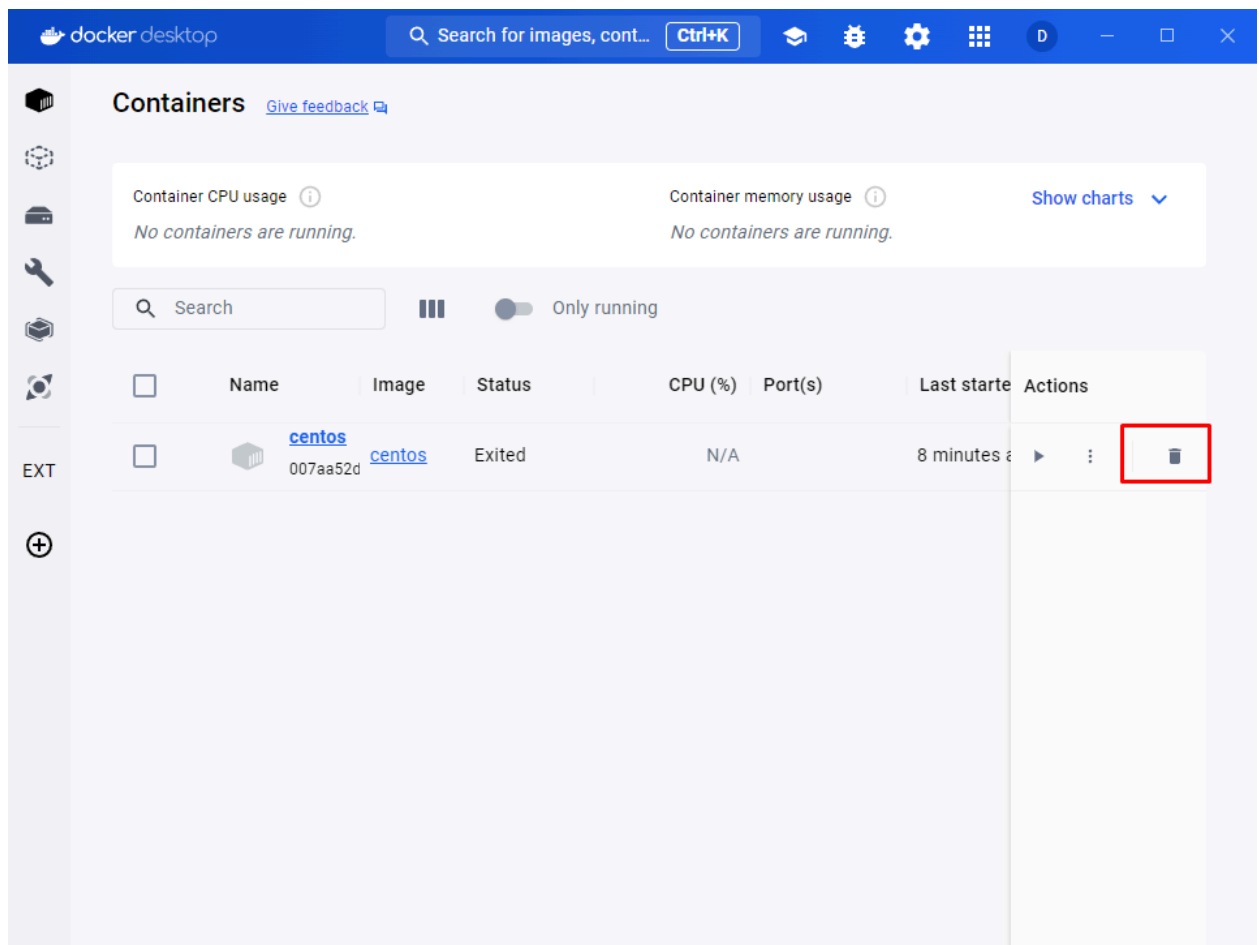
```
@007aa52df3b3:/
C:\Users\Dani>docker run -d centos
8bf6bba81906da808f0900aab1f2d3c3229e5da2bebc8d5221f7089c19ccd1c6

C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

What's Next?
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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]#
```

Vamos a comprobar que borrando el contenedor y creando uno nuevo a partir de la imagen el archivo no permanece.



```
@9e4dad656e98:/
C:\Users\Dani>docker run -d centos
8bf6bba81906da808f0900aab1f2d3c3229e5da2bebc8d5221f7089c19ccd1c6

C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

What's Next?
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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]# exit
exit
C:\Users\Dani>docker run -it --name centos centos
[root@9e4dad656e98 /]#
```

```
wn.

C:\Users\Dani>docker run -d centos
8bf6bba81906da808f0900aab1f2d3c3229e5da2bebc8d5221f7089c19ccd1c6

C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]# exit
exit

C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@09e4dad656e98 /]#
```

Como podemos comprobar no está. Ahora voy a volver a crear el fichero y a crear una imagen a partir de ese contenedor.

```
@9e4dad656e98:/
wn.

C:\Users\Dani>docker run -d centos
8bf6bba81906da808f0900aab1f2d3c3229e5da2bebc8d5221f7089c19ccd1c6

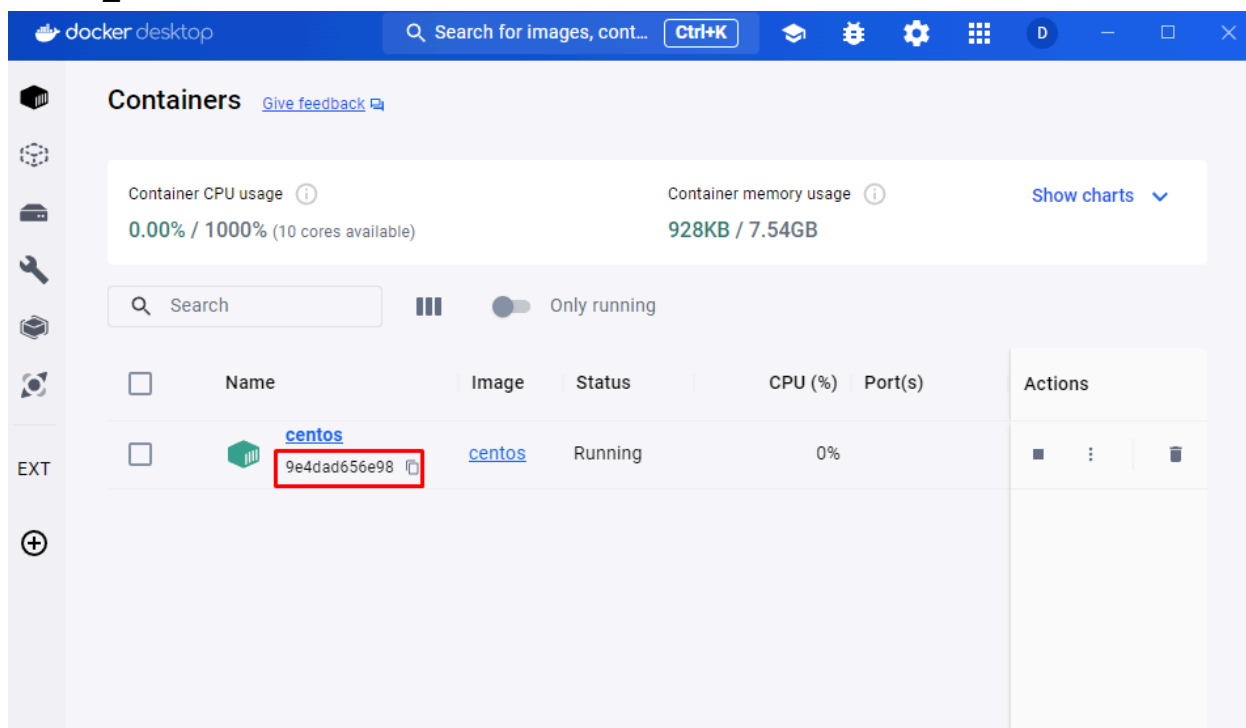
C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]# exit
exit

C:\Users\Dani>docker run -it --name centos centos
[root@9e4dad656e98 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@9e4dad656e98 /]# touch ficheroqueseborra
[root@9e4dad656e98 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@9e4dad656e98 /]#
```

Para crear la imagen a partir del contenedor usamos vamos a copiar la id del contenedor que aparece en la interfaz de docker y usaremos “docker commit id_contenedor nombre_contenedor”.



```
Símbolo del sistema
C:\Users\Dani>docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
docker.io/library/centos:latest

What's Next?
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C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]# exit
exit

C:\Users\Dani>docker run -it --name centos centos
[root@9e4dad656e98 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@9e4dad656e98 /]# touch ficheroqueseborra
[root@9e4dad656e98 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@9e4dad656e98 /]# docker commit 9e4dad656e98 centosconfichero
bash: docker: command not found
[root@9e4dad656e98 /]# exit
exit

C:\Users\Dani>docker commit 9e4dad656e98 centosconfichero
sha256:19617ac64f555a3adb00a65579d948ad33319c342ca2d30769d5979f2220a61c

C:\Users\Dani>
```

Ahora usamos “docker run -it --name centoscontenedorfichero centosconfichero” para crear el contenedor y hacemos un ls para comprobar que el archivo está.

```

C:\Users\Dani>docker run -it --name centos centos
[root@007aa52df3b3 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@007aa52df3b3 /]# touch ficheroqueseborra
[root@007aa52df3b3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@007aa52df3b3 /]# exit
exit

C:\Users\Dani>docker run -it --name centos centos
[root@9e4dad656e98 /]# ls
bin dev etc home lib lib64 lost+found media mnt opt proc root run sbin srv sys tmp usr var
[root@9e4dad656e98 /]# touch ficheroqueseborra
[root@9e4dad656e98 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@9e4dad656e98 /]# docker commit 9e4dad65e98 centosconfichero
bash: docker: command not found
[root@9e4dad656e98 /]# exit
exit

C:\Users\Dani>docker commit 9e4dad656e98 centosconfichero
sha256:19617ac64f555a3adb00a65579d948ad33319c342ca2d30769d5979f2220a61c

C:\Users\Dani>docker run -it --name centoscontenedorfichero centoscontenedorfichero
Unable to find image 'centoscontenedorfichero:latest' locally
docker: Error response from daemon: pull access denied for centoscontenedorfichero, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.

C:\Users\Dani>docker run -it --name centoscontenedorfichero centosconfichero
[root@74d795ed99c3 /]# ls
bin etc home lib64 media opt root sbin sys usr
dev ficheroqueseborra lib lost+found mnt proc run srv tmp var
[root@74d795ed99c3 /]#

```