Práctica II – Docker images

MARKEL ORALLO

Etiquetar y listar imágenes

Descargar la imagen de tomcat:latest

Para descargar la imagen de tomcat:latest ejecutamos el comando *docker pull tomcat:latest* o *docker image pull tomcat:latest* .

```
markel@MacBook-Pro-de-Markel ~ % docker image pull tomcat:latest
latest: Pulling from library/tomcat
955615a668ce: Already exists
2756ef5f69a5: Already exists
911ea9f2bd51: Already exists
27b0a22ee906: Already exists
785dffb36c6c: Pull complete
3fccb14f0369: Pull complete
4a0c30fedd9c: Pull complete
54a2fe1e7768: Pull complete
0ec8a3639ea0: Pull complete
c2cb90049b4a: Pull complete
Digest: sha256:54876d82d30746c5b625a784938864d5b726219e0aace09b3e57ef4dfa85d594
Status: Downloaded newer image for tomcat:latest
docker.io/library/tomcat:latest
markel@MacBook-Pro-de-Markel ~ %
```

Cambiar el tag de la imagen tomcat:latest

Para cambiar el tag de la imagen ejecutamos *docker image tag tomcat:latest tomcat:dev.*

```
[markel@MacBook-Pro-de-Markel ~ % docker image tag tomcat:latest tomcat:dev
[markel@MacBook-Pro-de-Markel ~ % docker images
REPOSITORY    TAG        IMAGE ID        CREATED       SIZE
tomcat        dev        bb832de23021    6 days ago    680MB
tomcat        latest     bb832de23021    6 days ago    680MB
markel@MacBook-Pro-de-Markel ~ %
```

Una vez ejecutado el comando tenemos dos imágenes idénticas con diferentes tags. El digest de las imágenes no ha cambiado porque la imagen no se ha modificado.

Compartir imágenes en Docker Hub

Ejecutando el comando docker push tomcat:dev obtenemos el siguiente error de autenticación.

```
[markel@MacBook-Pro-de-Markel ~ % docker push tomcat:dev
The push refers to repository [docker.io/library/tomcat]
4831bcd1167f: Layer already exists
977cfcbcf0fa: Layer already exists
4e4de253c94d: Layer already exists
3891808a925b: Layer already exists
d402f4f1b906: Layer already exists
00ef5416d927: Layer already exists
8555e663f65b: Layer already exists
d00da3cd7763: Layer already exists
4e61e63529c2: Layer already exists
799760671c38: Layer already exists
errors:
denied: requested access to the resource is denied
unauthorized: authentication required
```

Nos logeamos en docker y volvemos a probar:

```
[markel@MacBook-Pro-de-Markel ~ % docker login
Authenticating with existing credentials...
Login Succeeded
[markel@MacBook-Pro-de-Markel ~ % docker push tomcat:dev
The push refers to repository [docker.io/library/tomcat]
4831bcd1167f: Layer already exists
977cfcbcf0fa: Layer already exists
4e4de253c94d: Layer already exists
3891808a925b: Layer already exists
d402f4f1b906: Layer already exists
00ef5416d927: Layer already exists
8555e663f65b: Layer already exists
d00da3cd7763: Layer already exists
4e61e63529c2: Layer already exists
799760671c38: Layer already exists
errors:
denied: requested access to the resource is denied
unauthorized: authentication required
```

Si corregimos el tag de la imagen:

```
[markel@MacBook-Pro-de-Markel ~ % docker image tag tomcat:dev markel149/tomcat:dev
[markel@MacBook-Pro-de-Markel ~ % docker images
REPOSITORY          TAG         IMAGE ID        CREATED         SIZE
tomcat              dev         bb832de23021    6 days ago      680MB
tomcat              latest      bb832de23021    6 days ago      680MB
markel149/tomcat    dev         bb832de23021    6 days ago      680MB
[markel@MacBook-Pro-de-Markel ~ % docker push markel149/tomcat:dev
The push refers to repository [docker.io/markel149/tomcat]
4831bcd1167f: Layer already exists
977cfcbcf0fa: Layer already exists
4e4de253c94d: Layer already exists
3891808a925b: Layer already exists
d402f4f1b906: Layer already exists
00ef5416d927: Layer already exists
8555e663f65b: Layer already exists
d00da3cd7763: Layer already exists
4e61e63529c2: Layer already exists
799760671c38: Layer already exists
dev: digest: sha256:709c112a87273828f4df9caa99540a1d4f59891455cdfff7ec0ec99edc49f59b size: 2422
markel@MacBook-Pro-de-Markel ~ %
```

Comprobamos que la imagen esta en Docker Hub:

Comprobamos que la imagen que no tenia el formato correcto para Docker Hub sigue en nuestro registro local:

```
markel@MacBook-Pro-de-Markel ~ % docker images
REPOSITORY          TAG          IMAGE ID         CREATED        SIZE
tomcat              dev          bb832de23021     6 days ago     680MB
tomcat              latest       bb832de23021     6 days ago     680MB
markel149/tomcat    dev          bb832de23021     6 days ago     680MB
```

Borramos la imagen tomcat:dev.

```
markel@MacBook-Pro-de-Markel ~ % docker rmi tomcat:dev
Untagged: tomcat:dev
```

Listamos de nuevo las imágenes de nuestro nodo:

```
markel@MacBook-Pro-de-Markel ~ % docker images
REPOSITORY          TAG          IMAGE ID         CREATED        SIZE
tomcat              latest       bb832de23021     6 days ago     680MB
markel149/tomcat    dev          bb832de23021     6 days ago     680MB
```

Si lanzamos el comando docker image inspect markel149/tomcat:dev podemos comprobar que la imagen contiene todas las capas de la imagen original. Además, al borrar la imagen tomcat:dev de nuestro nodo, las salida del comando nos indica que tan solo a desetiquetado la imagen y que no ha borrado sus capas.

```
markel@MacBook-Pro-de-Markel ~ % docker image inspect markel149/tomcat:dev
[
    {
```

```json
    "Type": "layers",
    "Layers": [
        "sha256:799760671c382bd2492346f4c36ee4033cf917400be4354c8b096ecef88df34b",
        "sha256:4e61e63529c26e95bef3cf769d07847dee7590b37b6b685186ce5c37a509b06d",
        "sha256:d00da3cd77634730ab5bc8e98b784cda40259f8be6a9b7138b4eee24ca1226b3",
        "sha256:8555e663f65b2a41e3aa61c0440f73bc5fac86c94d1cc14331d86d1c699382bf",
        "sha256:00ef5416d927e1fe6332a3c71e73d9b99eb25f0606bc8ecb0cbec4322d113a6d",
        "sha256:d402f4f1b90606fb9bb7bdda4c2ce6ffd54f092e2a0ef025cf352aa2a9d1da45",
        "sha256:3891808a925b53e4286c8d9801b7496e864642eb116b8aaebf9bacd7343e3ab4",
        "sha256:4e4de253c94da1e1d78f268cbc72fc50c92396d06fbd8d6f769b2425153f9278",
        "sha256:977cfcbcf0fa1467958ffa990c56e3e8a5d09f163278474ff051fba24c2f2994",
        "sha256:4831bcd1167f42b4cfee1e046e52d5207bb16b64ffa730960de81356aaf3cd59"
    ]
},
```