

Lab 2 - Your first docker images

Create a transitive image

Tips

- Use the `docker commit`

Make our image

1. Run `nginx` image detached with param `-p 80:80` named `mynginx1`

```
docker run -d -p 80:80 --name mynginx1 nginx
```

Unable to find image 'nginx:latest' locally

latest: Pulling from library/nginx

8820d4aadbcd: Pull complete

26be9a3603ae: Pull complete

d8ded761e35b: Pull complete

ddc6b36d0e36: Pull complete

9a80f9a05524: Pull complete

baccdd222209: Pull complete

8db204c3cb06: Pull complete

Digest:

sha256:33e0bbc7ca9ecf108140af6288c7c9d1ecc77548cbfd3952fd8466a75edef
e57

Status: Downloaded newer image for nginx:latest

7b5969362aa8b5b0e636dfe87e826b5fcbcedce88213a0a211c86571f8d76ccd8

2. Check that the nginx page (localhost:80)

```
curl http://localhost:80
```

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.

Commercial support is available at nginx.com.

Thank you for using nginx.

3. Run a shell without stopping the Container

```
docker exec -it mynginx1 sh
```

4. Update the file `/usr/share/nginx/html/index.html` in the container

```
echo "Hello There!" > /usr/share/nginx/html/index.html
```

5. Check that the nginx page has been updated (localhost:80)

```
curl http://localhost:80  
Hello There!
```

6. Create a transitive image named `my_awesome_image`

```
docker commit mynginx1 my_awesome_image
```

```
sha256:c912ae197968c39f708550ea7997d566a2491ab1394b525d08784b6f2e5  
52878
```

7. Run the new image

```
docker run -d -p 8080:80 --name mynginx2 my_awesome_image  
  
a05f6922344fa427192e54c90e87bcfe5fee3624e804b411baaa0f2c7b84fc96
```

8. Check that the modifications are still present (localhost:80)

```
curl http://localhost:8080  
Hello There!
```

9. Check the layer with the `docker history` command

```
docker history my_awesome_image
```

```
IMAGE CREATED CREATED BY SIZE COMMENT  
c912ae197968 3 minutes ago nginx -g daemon off; 81.9kB  
33e0bbc7ca9e 13 days ago CMD ["nginx" "-g" "daemon off;"] 0B  
buildkit.dockerfile.v0  
13 days ago STOPSIGNAL SIGQUIT 0B buildkit.dockerfile.v0  
13 days ago EXPOSE map[80/tcp:{}] 0B buildkit.dockerfile.v0  
13 days ago ENTRYPOINT ["/docker-entrypoint.sh"] 0B buildkit.dockerfile.v0  
13 days ago COPY 30-tune-worker-processes.sh /docker-ent... 16.4kB  
buildkit.dockerfile.v0  
13 days ago COPY 20-envsubst-on-templates.sh /docker-ent... 12.3kB  
buildkit.dockerfile.v0  
13 days ago COPY 15-local-resolvers.envsh /docker-entryp... 12.3kB  
buildkit.dockerfile.v0  
13 days ago COPY 10-listen-on-ipv6-by-default.sh /docker... 12.3kB  
buildkit.dockerfile.v0  
13 days ago COPY docker-entrypoint.sh / # buildkit 8.19kB  
buildkit.dockerfile.v0  
13 days ago RUN /bin/sh -c set -x && groupadd --syst... 105MB  
buildkit.dockerfile.v0
```

13 days ago ENV DYNPKG_RELEASE=1~bookworm 0B buildkit.dockerfile.v0
13 days ago ENV PKG_RELEASE=1~bookworm 0B buildkit.dockerfile.v0
13 days ago ENV NJS_RELEASE=1~bookworm 0B buildkit.dockerfile.v0
13 days ago ENV NJS_VERSION=0.9.1 0B buildkit.dockerfile.v0
13 days ago ENV NGINX_VERSION=1.29.1 0B buildkit.dockerfile.v0
13 days ago LABEL maintainer=NGINX Docker Maintainers <d... 0B
buildkit.dockerfile.v0
2 weeks ago # debian.sh --arch 'arm64' out/ 'bookworm' '...' 108MB
debuerreotype 0.15

Upload our image

1. Tag your image with the tag

<dockerHubId>/my_awesome_image:1.0

```
docker tag my_awesome_image samigrbj/my_awesome_image:1.0
```

2. List your docker images

docker images

1. What do you see ?

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
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my_awesome_image	latest	c912ae197968	7 minutes ago	281MB
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samigrbj/my_awesome_image	1.0	c912ae197968	7 minutes ago	281MB
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samigrbj/mynodejs	1.0	f99bd2628ca9	About an hour ago	18.5MB
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mynodejs	latest	f99bd2628ca9	About an hour ago	18.5MB
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nginx	latest	33e0bbc7ca9e	13 days ago	281MB
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n8nio/n8n	latest	4a475a6fdeb9	3 weeks ago	1.69GB
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alpine	latest	4bcff63911fc	6 weeks ago	13.3MB
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postgres	15	5ab68e212eab	2 months ago	628MB
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jupyter/scipy-notebook	latest	fca4bcc9cbd4	22 months ago	5.42GB
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3. Use the CLI to log into your docker account

```
docker login
```

4. Push your image

```
docker push samigrbj/my_awesome_image:1.0
```

The push refers to repository [docker.io/samigrbj/my_awesome_image]

baccdd222209: Mounted from library/nginx

26be9a3603ae: Mounted from library/nginx

8db204c3cb06: Mounted from library/nginx

ddc6b36d0e36: Mounted from library/nginx

d8ded761e35b: Mounted from library/nginx

8820d4aadbcd: Mounted from library/nginx

5802b9c6c507: Pushed

9a80f9a05524: Mounted from library/nginx

1.0: digest:

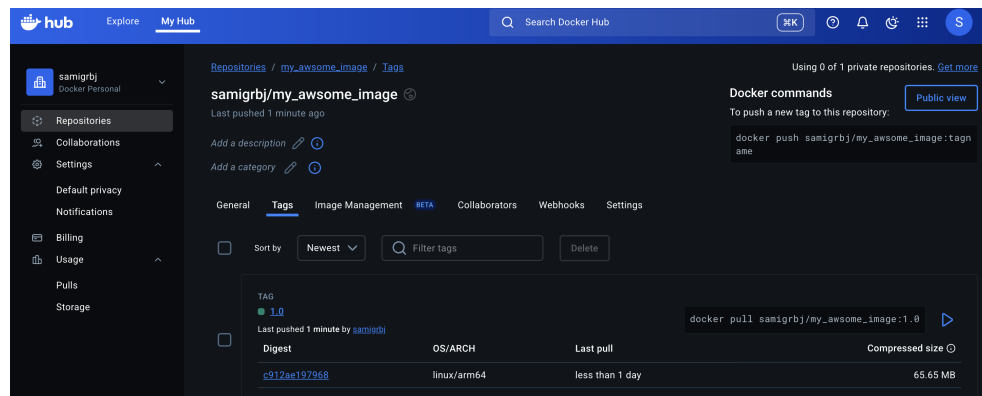
sha256:c912ae197968c39f708550ea7997d566a2491ab1394b525d08784b6f2e5

52878 size: 2037

5. Check that your image is available on

https://hub.docker.com/repository/docker/<dockerHubId>/my_awesome_image/

https://hub.docker.com/repository/docker/samigrbj/my_awesome_image/



6. Delete the repository

https://hub.docker.com/repository/docker/<dockerHubId>/my_awesome_image/settings

https://hub.docker.com/repository/docker/samigrbj/my_awesome_image/settings

Name	Last Pushed	Contains	Visibility	Scout
samigrbj/my_awesome_image	3 minutes ago	IMAGE	Public	Inactive