```
controlplane $ mkdir env-arg-exercise
controlplane $ cd env-arg-exercise
controlplane $ touch Dockerfile
controlplane $ ls -al
total 8
drwxr-xr-x 2 root root 4096 Feb 27 13:02 .
drwx------ 6 root root 4096 Feb 27 13:02 ..
-rw-r--r-- 1 root root    0 Feb 27 13:02 Dockerfile
controlplane $
```

```
controlplane $ vim Dockerfile
```

```dockerfile
# ENV and ARG example
ARG TAG=latest
FROM ubuntu:$TAG
LABEL maintainer=luigi@mydomain.com
ENV PUBLISHER=packt APP_DIR=/usr/local/app/bin
CMD ["env"]
~
~
```

```
controlplane $ docker image build -t env-arg --build-arg TAG=19.04 .
```

```
controlplane $ docker image build -t env-arg --build-arg TAG=19.04 .
Sending build context to Docker daemon  2.048kB
Step 1/5 : ARG TAG=latest
Step 2/5 : FROM ubuntu:$TAG
19.04: Pulling from library/ubuntu
4dc9c2fff018: Pull complete
0a4ccbb24215: Pull complete
c0f243bc6706: Pull complete
5ff1eaecba77: Pull complete
Digest: sha256:2adeae829bf27a3399a0e7db8ae38d5adb89bcaf1bbef378240bc0e6724e8344
Status: Downloaded newer image for ubuntu:19.04
 ---> c88ac1f841b7
Step 3/5 : LABEL maintainer=luigi@mydomain.com
 ---> Running in cc0452f17d06
Removing intermediate container cc0452f17d06
 ---> 064455a94e6c
Step 4/5 : ENV PUBLISHER=packt APP_DIR=/usr/local/app/bin
 ---> Running in 1ffb8ee6516f
Removing intermediate container 1ffb8ee6516f
 ---> b66311a2eb84
Step 5/5 : CMD ["env"]
 ---> Running in 3e009e0b466c
Removing intermediate container 3e009e0b466c
 ---> 9b0fd71dc7fe
Successfully built 9b0fd71dc7fe
Successfully tagged env-arg:latest
```

```
controlplane $ docker container run env-arg
```

```
controlplane $ docker container run env-arg
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
HOSTNAME=015891a90fa8
PUBLISHER=packt
APP_DIR=/usr/local/app/bin
HOME=/root
```

```
controlplane $ docker images
REPOSITORY    TAG       IMAGE ID       CREATED         SIZE
env-arg       latest    9b0fd71dc7fe   9 minutes ago   70MB
ubuntu        19.04     c88ac1f841b7   3 years ago     70MB
```

```
controlplane $ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: crills
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
```

```
controlplane $ docker tag env-arg crills/test-repository:01
controlplane $ docker push crills/test-repository:01
The push refers to repository [docker.io/crills/test-repository]
311180c0cfcf: Mounted from library/ubuntu
8ac4be6e0e4b: Mounted from library/ubuntu
363295e4406a: Mounted from library/ubuntu
873cbe4bd21e: Mounted from library/ubuntu
01: digest: sha256:4b4c688d00bfd9d98f655c35188b17068dd8a3247f640142bab67c33c88689d3 size: 1152
```

https://hub.docker.com/repository/docker/crills/test-repository/general

ɔio ⊞ MyTIM 📁 Nokia 🔴 ADP HR Suite 🐸 Embedded learning... ⓞ Online Courses - A... 📁 Digicom_tasks_java... 🗋 Cisco Networking A... 🔍 Packages - The Go... ⓞ Kubernetes + Dock... 🗋 ASCII 👁 Learning Docker | K... 🗋 Virtualizzazione/Vir...

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crills 〉 Repositories 〉 test-repository 〉 General

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General Tags Builds Collaborators Webhooks Settings

ⓘ Add a short description for this repository

Update

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.

🌐 **crills / test-repository**

Docker commands

Public View

Description

To push a new tag to this repository,

This repository does not have a description ✎

```
docker push crills/test-repository:tagname
```

🕐 Last pushed: 2 minutes ago

Tags

🛇 IMAGE ANALYSIS INACTIVE
Activate

Automated Builds

This repository contains 1 tag(s).

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Tag	OS	Type	Pulled	Pushed
🟢 01	🐧	Image	---	2 minutes ago

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See all

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crills › Repositories › test-repository › 01

crills/test-repository:01

Delete Tag

DIGEST: sha256:4b4c688d00bfd9d98f655c35188b17068dd8a3247f640142bab67c33c88689d3

OS/ARCH	COMPRESSED SIZE ⓘ	LAST PUSHED	TYPE
linux/amd64	26.37 MB	2 minutes ago by crills	Image

Image Layers   Vulnerabilities

IMAGE LAYERS ⓘ

1	**ADD file ... in /**	**26.34 MB**
2	/bin/sh -c [-z "$(apt-get	30.27 KB
3	/bin/sh -c set -xe &&	861 B
4	/bin/sh -c mkdir -p /run/systemd	163 B
5	CMD ["/bin/bash"]	0 B
6	LABEL maintainer=luigi@mydomain.com	0 B
7	ENV PUBLISHER=packt APP_DIR=/usr/local/app/bin	0 B
8	CMD ["env"]	0 B

Command

```
ADD file:98c7df2bed4738dded17ef3fc4dd8f3b1e1d1d742a0245c9f1e518daea8e445e in /
```
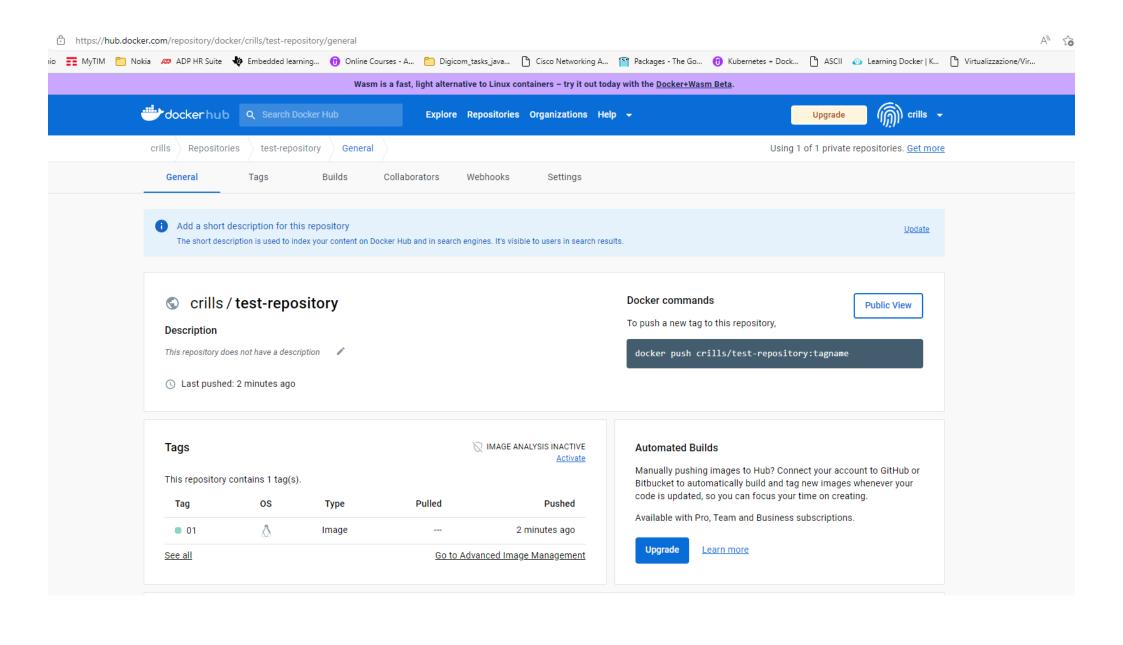
```
controlplane $ docker tag env-arg crills/test-repository:env-arg01
controlplane $ docker push crills/test-repository:env-arg01
The push refers to repository [docker.io/crills/test-repository]
311180c0cfcf: Layer already exists
8ac4be6e0e4b: Layer already exists
363295e4406a: Layer already exists
873cbe4bd21e: Layer already exists
env-arg01: digest: sha256:4b4c688d00bfd9d98f655c35188b17068dd8a3247f640142bab67c33c88689d3 size: 1152
```
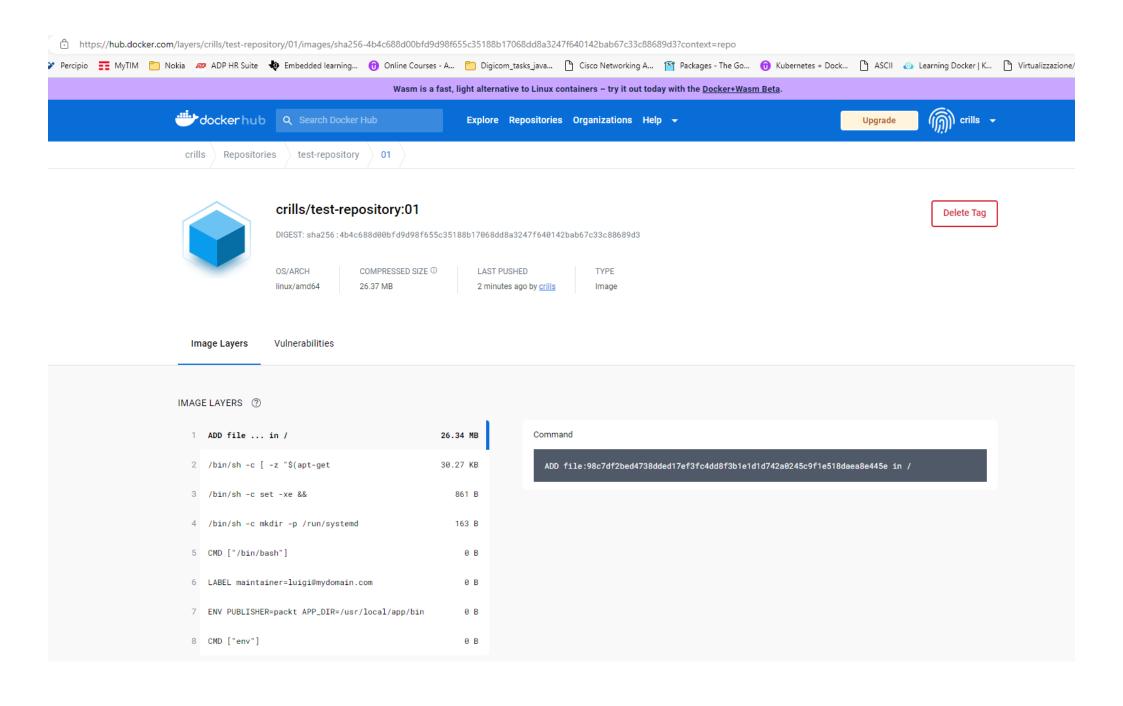
docker hub   Search Docker Hub   Explore   Repositories   Organizations   Help ▾   Upgrade   crills ▾

crills › Repositories › test-repository › General

Using 1 of 1 private repositories. Get more

General   Tags   Builds   Collaborators   Webhooks   Settings

ℹ **Add a short description for this repository**   Update
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.

🌐 crills / test-repository

Description

This repository does not have a description ✎

🕐 Last pushed: a few seconds ago

Docker commands   Public View

To push a new tag to this repository,

```
docker push crills/test-repository:tagname
```

Tags   🛡 IMAGE ANALYSIS INACTIVE
Activate

This repository contains 2 tag(s).

Tag	OS	Type	Pulled	Pushed
● env-arg01	🐧	Image	---	a few seconds ago
● 01	🐧	Image	---	5 minutes ago

See all   Go to Advanced Image Management

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

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crills 〉 Repositories 〉 test-repository 〉 env-arg01

crills/test-repository:env-arg01

Delete Tag

DIGEST: sha256:4b4c688d00bfd9d98f655c35188b17068dd8a3247f640142bab67c33c88689d3

OS/ARCH	COMPRESSED SIZE ⓘ	LAST PUSHED	TYPE
linux/amd64	26.37 MB	2 minutes ago by crills	Image

Image Layers   Vulnerabilities

IMAGE LAYERS ⑦

1	**ADD file ... in /**	**26.34 MB**
2	/bin/sh -c [-z "$(apt-get	30.27 KB
3	/bin/sh -c set -xe &&	861 B
4	/bin/sh -c mkdir -p /run/systemd	163 B
5	CMD ["/bin/bash"]	0 B
6	LABEL maintainer=luigi@mydomain.com	0 B
7	ENV PUBLISHER=packt APP_DIR=/usr/local/app/bin	0 B
8	CMD ["env"]	0 B

Command

```
ADD file:98c7df2bed4738dded17ef3fc4dd8f3b1e1d1d742a0245c9f1e518daea8e445e in /
```