

## TP : Docker

### I – Proposer un service

1)

```
marou@marou-VirtualBox:~$ sudo docker pull jenkins/jenkins
Using default tag: latest
latest: Pulling from jenkins/jenkins
918547b94326: Pull complete
3791d5acc717: Pull complete
f51946623d32: Pull complete
1c387e13e02b: Pull complete
68145f763db4: Pull complete
febe2bcc6811: Pull complete
aeb410119768: Pull complete
efd689ab087f: Pull complete
07c776e56e13: Pull complete
91db1181198d: Pull complete
9b10455f5daa: Pull complete
84852ccd6c5d: Pull complete
3c6b72b1dacd: Pull complete
Digest: sha256:d50df87283b64ebd8b33055e0909fa20ed8745c5a96568c0c6ccaab8cfad7c0e
Status: Downloaded newer image for jenkins/jenkins:latest
docker.io/jenkins/jenkins:latest
marou@marou-VirtualBox:~$
```

2)

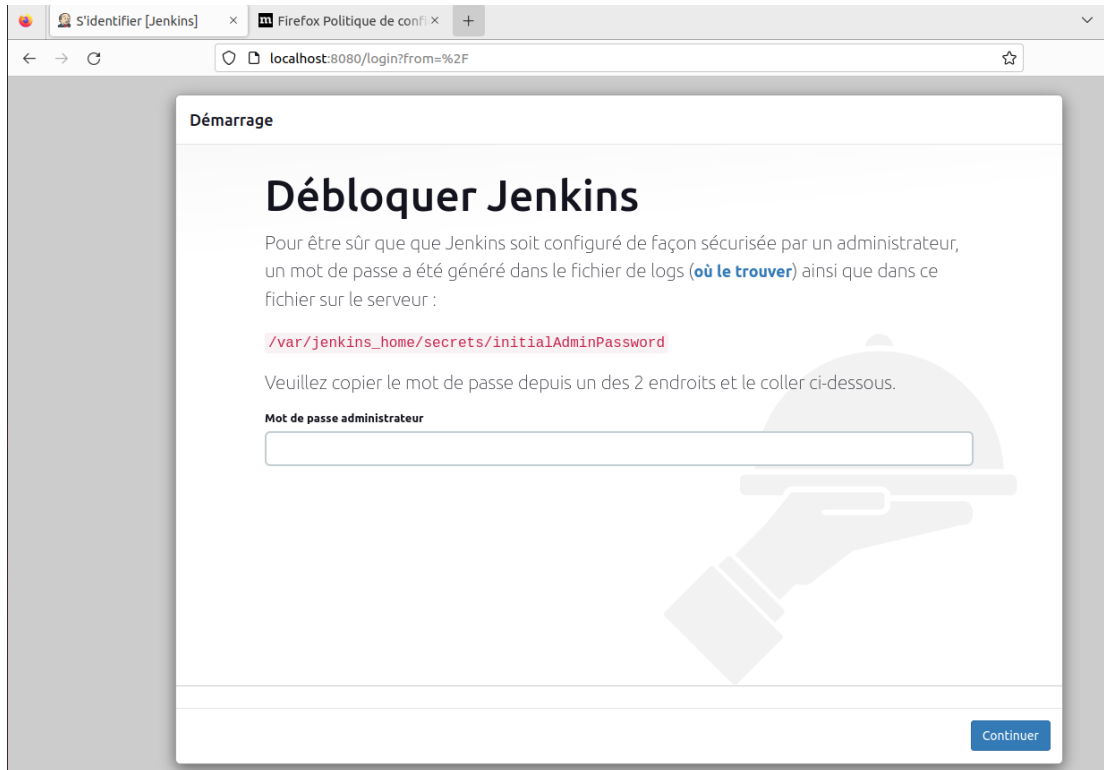
```
marou@marou-VirtualBox:~$ sudo docker run -d -p 8080:8080 -v /var/jenkins_home --name tpdocker jenkins/jenkins
fe14e9c3088f6898c72686b314b2e32f88acfd48cf2498fae9a6f461ec60ef3d
```

3) Test du service

```
marou@marou-VirtualBox:~$ sudo docker ps
```

CONTAINER ID	IMAGE	NAMES	COMMAND	CREATED	STATUS	PORTS
ce59b6bd0e5b	jenkins/jenkins:lts		"/usr/bin/tini -- /u..."	4 minutes ago	Up 4 minutes	0.0.0.0:8080->8080/tcp, :::8080->8080/tcp, 50000/tcp

```
marou@marou-VirtualBox:~$
```



On accède bien à l'interface Jenkins sur la VM mais aussi sur la machine hôte



4)

```
marou@marou-VirtualBox:~$ sudo docker stop mon_jenkins
mon_jenkins
marou@marou-VirtualBox:~$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix://
n%2Fdocker.sock/v1.24/containers/json": dial unix /var/run/docker.sock: connect:
marou@marou-VirtualBox:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
marou@marou-VirtualBox:~$
```

En refaisant docker ps, on voit bien que le conteneur n'est plus actif.

## II – Service « from scratch »

1)

```
marou@marou-VirtualBox:~$ wget https://get.jenkins.io/war-stable/latest/jenkins.war
--2023-05-20 12:29:10-- https://get.jenkins.io/war-stable/latest/jenkins.war
Résolution de get.jenkins.io (get.jenkins.io)... 52.167.253.43
Connexion à get.jenkins.io (get.jenkins.io)[52.167.253.43]:443... connecté.
requête HTTP transmise, en attente de la réponse... 302 Found
Emplacement : https://ftp-nyc.osuosl.org/pub/jenkins/war-stable/latest/jenkins.war [suivant]
--2023-05-20 12:29:11-- https://ftp-nyc.osuosl.org/pub/jenkins/war-stable/latest/jenkins.war
Résolution de ftp-nyc.osuosl.org (ftp-nyc.osuosl.org)... 64.50.233.100, 2600:3404:200:237::2
Connexion à ftp-nyc.osuosl.org (ftp-nyc.osuosl.org)[64.50.233.100]:443... connecté.
requête HTTP transmise, en attente de la réponse... 200 OK
Taille : 98358036 (94M) [application/x-java-archive]
Enregistre : 'jenkins.war'

jenkins.war          100%[=====] 93,80M  21,3MB/s  ds 6,8s

2023-05-20 12:29:18 (13,7 MB/s) - 'jenkins.war' enregistré [98358036/98358036]
marou@marou-VirtualBox:~$
```

## 2) Création du fichier Dockerfile

```
Ouvrir  [icon]  *Dockerfile
~/Documents/tpdocker

1 FROM tomcat:latest
2 COPY ./jenkins.war /usr/local/tomcat/webapps/
3 EXPOSE 8080
4
```

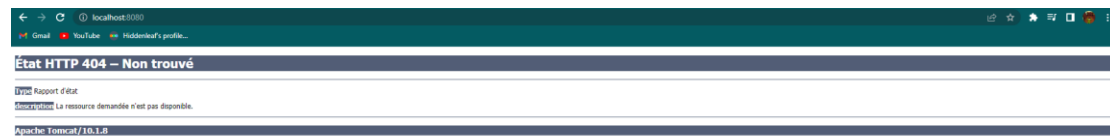
## 3) Construction de l'image

```

marou@marou-VirtualBox:~/Documents/tpdocker$ sudo docker build -t tpdocker .
[+] Building 10.4s (7/7) FINISHED
=> [internal] load build definition from Dockerfile                                0.0s
=> => transferring dockerfile: 115B                                              0.0s
=> [internal] load .dockerignore                                                  0.0s
=> => transferring context: 2B                                                    0.0s
=> [internal] load metadata for docker.io/library/tomcat:latest                  1.4s
=> [internal] load build context                                                  1.1s
=> => transferring context: 98.38MB                                              1.1s
=> [1/2] FROM docker.io/library/tomcat:latest@sha256:74683fce813ff49eb65e01074774d499c52d198be503a06577f3225290faadba 7.9s
=> => resolve docker.io/library/tomcat:latest@sha256:74683fce813ff49eb65e01074774d499c52d198be503a06577f3225290faadba 0.0s
=> => sha256:cb3e139e91a045529d46a88cd97cae9dd2be37609a167bdb5febb6673451ae91 1.79kB / 1.79kB 0.0s
=> => sha256:311570738ca337a61aec180371ec6033323079d0f9c69ba6760f8824e41a257 12.94kB / 12.94kB 0.0s
=> => sha256:74683fce813ff49eb65e01074774d499c52d198be503a06577f3225290faadba 1.21kB / 1.21kB 0.0s
=> => sha256:1bc677758ad7fa4503417ae5be18809c5a8679b5b36fcd1464d5a8e41cb13305 30.43MB / 30.43MB 1.1s
=> => sha256:0d0e0ecb256ae3e8b7625494ed35189f845766552b7159a17f634706e28a9687 17.05MB / 17.05MB 1.1s
=> => sha256:c24bf4c725c221ddbb66e056716cf961f79001fedf2e8a0cddab347244398bac 192.59MB / 192.59MB 3.9s
=> => extracting sha256:1bc677758ad7fa4503417ae5be18809c5a8679b5b36fcd1464d5a8e41cb13305 2.1s
=> => sha256:4fb255c76461d67abc91f408697fa9ebae85009a5d6d94a905e52946bab9baa0 1768 / 1768 1.3s
=> => sha256:b388fec4cd218ebb7a17dbc15b7bd6ffbe6d053b45bb1a993e6243ac0ece9955 1718 / 1718 1.3s
=> => sha256:4800bac131aa764af803f5dd7a0dd4b2da46b6351ca3e1f03724e3ff1215d9f9 12.64MB / 12.64MB 1.8s
=> => sha256:fc4cc5ff91562e6f3b0f877b9b0675629e066965ebdd943cbafb12520904c3e4 1318 / 1318 1.5s
=> => extracting sha256:0d0e0ecb256ae3e8b7625494ed35189f845766552b7159a17f634706e28a9687 0.9s
=> => extracting sha256:c24bf4c725c221ddbb66e056716cf961f79001fedf2e8a0cddab347244398bac 3.1s
=> => extracting sha256:4fb255c76461d67abc91f408697fa9ebae85009a5d6d94a905e52946bab9baa0 0.0s
=> => extracting sha256:b388fec4cd218ebb7a17dbc15b7bd6ffbe6d053b45bb1a993e6243ac0ece9955 0.0s
=> => extracting sha256:4800bac131aa764af803f5dd7a0dd4b2da46b6351ca3e1f03724e3ff1215d9f9 0.2s
=> => extracting sha256:fc4cc5ff91562e6f3b0f877b9b0675629e066965ebdd943cbafb12520904c3e4 0.0s
=> [2/2] COPY ./jenkins.war /usr/local/tomcat/webapps/                          0.6s
=> => exporting to image                                                         0.3s
=> => exporting layers                                                            0.3s
=> => writing image sha256:fb33e1728817defb638adb432c18cb9d144ca5ffdf3e04ecd14af2cbc28a55da7 0.0s
=> => naming to docker.io/library/tpdocker                                     0.0s
marou@marou-VirtualBox:~/Documents/tpdocker$

```

#### 4) Test du service



Le service est accessible mais je rencontre une erreur, en effet lors du lancement du conteneur, l'execution se stop ici sans me montrer d'erreur :

```

20-May-2023 10:44:20.314 INFO [main] org.apache.catalina.startup.HostConfig.deployWAR Deployment of web application archive [/usr/local/tomcat/webapps/jenkins.war] has finished in [3,531] ms
20-May-2023 10:44:20.325 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-8080"]
20-May-2023 10:44:20.361 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in [3662] milliseconds

```

Ce la ne marche donc pas totalement même si on peut effectuer accéder au service