

Job4

Job 04

Utilisation de Dockerfile pour créer une image SSH (compte : root et mot de passe : root123) sans utiliser une image SSH existante , voir redirection des ports (utiliser un autre port que le 22) , crée et lancez le conteneur et se connecter pour vérifier l'accès SSH.

Doc suivie : <https://medium.com/@ratnesh4209211786/simplified-ssh-server-setup-within-a-docker-container-77eedd87a320>

Création du dockerfile ("ssh") :

```
debian@debian: ~  
GNU nano 7.2 ssh *  
# Utilisation de l'image la plus récente d'Ubuntu  
FROM ubuntu:latest  
  
# Installation d'OpenSSH  
RUN apt-get update && apt-get install -y openssh-server  
  
# Changement du passwd de l'utilisateur root  
RUN echo 'root:root123' | chpasswd  
  
# Changement du port SSH pour 8444  
RUN sed -i 's/#Port 22/Port 8444/' /etc/ssh/sshd_config  
  
# Activation de l'authent par mdp pour SSH  
RUN sed -i 's/#PasswordAuthentication/PasswordAuthentication/' /etc/ssh/sshd_config  
  
# Activation de la connexion en tant que root via SSH  
RUN sed -i 's/#PermitRootLogin prohibit-password/PermitRootLogin yes/' /etc/ssh/sshd_config  
  
# Creation du repertoire necessaire pour SSH  
RUN mkdir /var/run/sshd  
  
# Exposition du nouveau port SSH  
EXPOSE 8444  
  
# Démarrage du service SSH  
CMD ["/usr/sbin/sshd", "-D"]
```

#Utilisation de l'image la plus récente d'Ubuntu

FROM ubuntu:latest

#Installation d'OpenSSH

RUN apt-get update && apt-get install -y openssh-server

#Changement du passwd de l'utilisateur root

RUN echo 'root:root123' | chpasswd

#Changement du port SSH pour 8444

RUN sed -i 's/#Port 22/Port 8444/' /etc/ssh/sshd_config

#Activation de l'authent par mdp pour SSH

RUN sed -i 's/#PasswordAuthentication/PasswordAuthentication/'
/etc/ssh/sshd_config

#Activation de la connexion en tant que root via SSH

RUN sed -i 's/#PermitRootLogin prohibit-password/PermitRootLogin yes/'
/etc/ssh/sshd_config

#Creation du repertoire necessaire pour SSH

RUN mkdir /var/run/sshd

#Exposition du nouveau port SSH

EXPOSE 8444

#Démarrage du service SSH
CMD ["/usr/sbin/sshd", "-D"]

Build de l'image :

sudo docker build -t ssh -f ssh .

```
debian@debian:~$ sudo docker build -t ssh -f ssh .
[+] Building 1.3s (11/11) FINISHED                                docker:default
=> [internal] load build definition from ssh                      0.0s
=> => transferring dockerfile: 812B                               0.0s
=> [internal] load metadata for docker.io/library/ubuntu:latest  1.1s
=> [internal] load .dockerignore                                  0.0s
=> => transferring context: 2B                                     0.0s
=> [1/7] FROM docker.io/library/ubuntu:latest@sha256:3f85b7caad41a95462cf5b787d8a04604c8262c 0.0s
=> CACHED [2/7] RUN apt-get update && apt-get install -y openssh-server 0.0s
=> CACHED [3/7] RUN echo 'root:root123' | chpasswd                0.0s
=> CACHED [4/7] RUN sed -i 's/#Port 22/Port 8444/' /etc/ssh/sshd_config 0.0s
=> CACHED [5/7] RUN sed -i 's/#PasswordAuthentication/PasswordAuthentication/' /etc/ssh/sshd 0.0s
=> CACHED [6/7] RUN sed -i 's/#PermitRootLogin prohibit-password/PermitRootLogin yes/' /etc/ 0.0s
=> CACHED [7/7] RUN mkdir /var/run/ssh                             0.0s
=> exporting to image                                             0.0s
=> => exporting layers                                           0.0s
=> => writing image sha256:1902b397fe0bdc6dd034978cf0c6fb793a1e2dba581926eeb5ab74e87ea0ee00 0.0s
=> => naming to docker.io/library/ssh                             0.0s
debian@debian:~$ |
```

On lance le conteneur avec : sudo docker run -d -p 8444:8444 ssh

```
debian@debian:~$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
739b847c8f5a   ssh      "/usr/sbin/sshd -D"     About a minute ago    Up About a minute    0.0.0.0:8444->8444/tcp, :::8444->8444/tcp    festive_chaplygin
debian@debian:~$ |
```

Connexion en SSH depuis ma Debian (mdp : root123) :

ssh root@localhost -p 8444

```
debian@debian:~$ ssh root@localhost -p 8444
root@localhost's password:
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.1.0-21-amd64 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

This system has been minimized by removing packages and content that are
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
Last login: Tue May 14 16:57:30 2024 from 172.17.0.1
root@739b847c8f5a:~# |
```

Connexion au conteneur en SSH depuis mon poste (mdp : root123) :

ssh root@192.168.107.131 -p 8444

```
C:\Users\pgalt>ssh root@192.168.107.131 -p 8444
root@192.168.107.131's password:
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.1.0-21-amd64 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

This system has been minimized by removing packages and content that are
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
Last login: Tue May 14 16:18:08 2024 from 172.17.0.1
root@57c3dc95cf42:~# |
```

⇒ Le job fonctionne.

→ Snapshot 3