

Lab: Docker 實做練習 sshd

參考: https://github.com/sakanamax/SA_dockerReading/blob/master/Dockerfile/sshd/openSUSE423sshd_Dockerfile

建立工作目錄

```
$ mkdir sshd
```

進入工作目錄

```
$ cd sshd
```

取得練習 Dockerfile

```
$ wget https://raw.githubusercontent.com/sakanamax/SA_dockerReading/master/Dockerfile/sshd/opensuseLeap15_sshd_Dockerfile
```

將檔案重新命名

```
$ mv opensuseLeap15_sshd_Dockerfile Dockerfile
```

請觀察 Dockerfile 內容

```
$ cat Dockerfile
```

觀察 docker images

```
$ docker images
```

進行 docker build

```
$ docker build -t testrepo/sshd_opensuse15 .
```

觀察 docker images

```
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
testrepo/sshd_opensuse15	latest	dbbe4adc4c6f	26 seconds ago	251MB
opensuse/leap	15	fef5ad254f63	5 weeks ago	103MB

以背景方式執行 docker 隨機指定 port publish

```
$ docker run -d -P testrepo/sshd_opensuse15
```

觀察相關資訊

```
$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
a95ef66d8195	testrepo/sshd_opensuse15	"/usr/sbin/sshd -D"	7 seconds ago	Up 6 seconds	0.0.0.0:32768->22/tcp	condescending_mendeleev

使用 ssh 指令進行連接測試, 例如 `ssh -l root SERVER_IP -p XXXX`

指定 port 方式執行 sshd

```
$ docker run -d -p 8022:22 testrepo/sshd_opensuse15
```

以相同方式練習

https://github.com/sakanamax/SA_dockerReading/tree/master/Dockerfile/jupyterhub

https://github.com/sakanamax/SA_dockerReading/tree/master/Dockerfile/R_shiny

Lab: docker exec

觀察資訊

\$ docker ps

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
8a38d6ab1bd6	testrepo/sshd_opensuse423	"/usr/sbin/sshd -D"	9 minutes ago	Up 9 minutes	0.0.0.0:8022->22/tcp	eloquent_neumann
f3ddd5146418	testrepo/sshd_opensuse423	"/usr/sbin/sshd -D"	17 minutes ago	Up 17 minutes	0.0.0.0:32768->22/tcp	objective_mccarthy

docker exec

- Run a command in a running container
- 會在 container 啟動 2nd process 執行

直接執行指令方式

\$ docker exec 8a38d6ab1bd6 cat /etc/hosts

```
127.0.0.1    localhost
::1         localhost ip6-localhost ip6-loopback
fe00::0     ip6-localnet
ff00::0     ip6-mcastprefix
ff02::1     ip6-allnodes
ff02::2     ip6-allrouters
172.17.0.3   8a38d6ab1bd6
```

拿來執行 shell

\$ docker exec -it 8a38d6ab1bd6 /bin/bash

docker attach

- attach - Attach to a running container 針對已經執行的 container 再次進入到容器內
- 如果使用 --sig-proxy=false 的方式（預設 --sig-proxy=true）那 Ctrl + C 之後 container 不會停止