

13、DockerFile脚本文件命令之CMD和ENTRYPOINT命令区别

如果在运行镜像时增加一个命令-l, 此时镜像中的CMD命令被执行, CMD命令会将-l命令替换掉["ls","-a"], 最后变成-l, 又因为-l不是命令, 所以报错。

+ ::

```
[root@kuangshen dockerfile]# docker run dd8e4401d72f -l
docker: Error response from daemon: OCI runtime create failed: container_linux.go:349: starting container process caused "exec: \
-l\": executable file not found in $PATH": unknown.
[root@kuangshen dockerfile]#
```

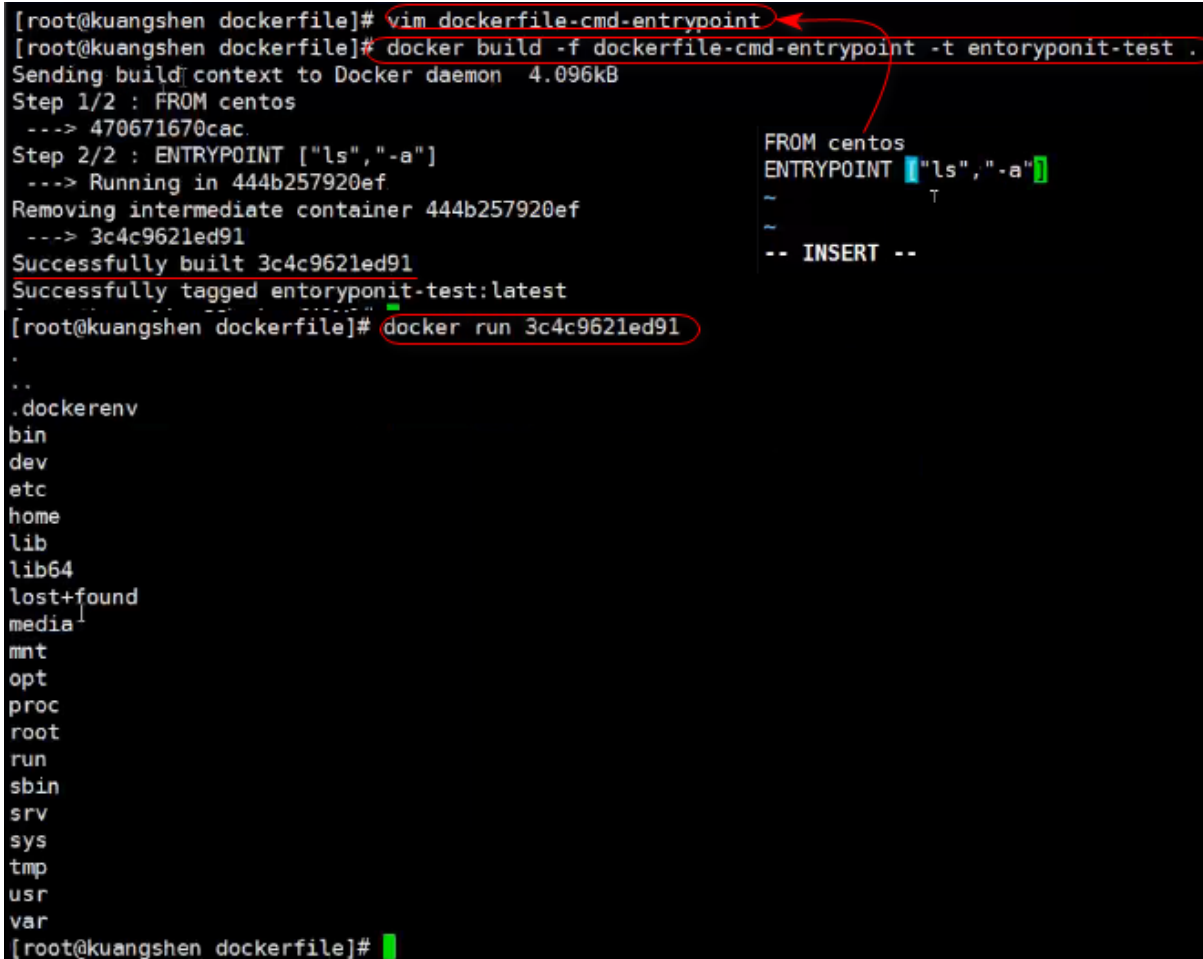
可以看到直接追加ls -al是没有问题的, 直接替换了CMD命令

```
[root@kuangshen dockerfile]# docker run dd8e4401d72f ls -al
total 56
drwxr-xr-x  1 root root 4096 May 15 13:13 .
drwxr-xr-x  1 root root 4096 May 15 13:13 ..
-rwxr-xr-x  1 root root    0 May 15 13:13 .dockerenv
lrwxrwxrwx  1 root root    7 May 11  2019 bin -> usr/bin
drwxr-xr-x  5 root root  340 May 15 13:13 dev
drwxr-xr-x  1 root root 4096 May 15 13:13 etc
drwxr-xr-x  2 root root 4096 May 11  2019 home
lrwxrwxrwx  1 root root    7 May 11  2019 lib -> usr/lib
lrwxrwxrwx  1 root root    9 May 11  2019 lib64 -> usr/lib64
drwx-----  2 root root 4096 Jan 13 21:48 lost+found
drwxr-xr-x  2 root root 4096 May 11  2019 media
drwxr-xr-x  2 root root 4096 May 11  2019 mnt
drwxr-xr-x  2 root root 4096 May 11  2019 opt
dr-xr-xr-x 118 root root    0 May 15 13:13 proc
dr-xr-x---  2 root root 4096 Jan 13 21:49 root
drwxr-xr-x 11 root root 4096 Jan 13 21:49 run
lrwxrwxrwx  1 root root    8 May 11  2019 sbin -> usr/sbin
drwxr-xr-x  2 root root 4096 May 11  2019 srv
dr-xr-xr-x 13 root root    0 Mar 23 14:00 sys
drwxrwxrwt  7 root root 4096 Jan 13 21:49 tmp
drwxr-xr-x 12 root root 4096 Jan 13 21:49 usr
drwxr-xr-x 20 root root 4096 Jan 13 21:49 var
[root@kuangshen dockerfile]#
```

(2) 测试ENTRYPOINT命令

可以看到在docker run运行镜像时ENTRYPOINT后面的ls -a会被执行(此时和cmd没什么区别)

```
[root@kuangshen dockerfile]# vim dockerfile-cmd-entrypoint
[root@kuangshen dockerfile]# docker build -f dockerfile-cmd-entrypoint -t entoryponit-test .
Sending build context to Docker daemon 4.096kB
Step 1/2 : FROM centos
--> 470671670cac
Step 2/2 : ENTRYPOINT ["ls","-a"]
--> Running in 444b257920ef
Removing intermediate container 444b257920ef
--> 3c4c9621ed91
Successfully built 3c4c9621ed91
Successfully tagged entoryponit-test:latest
[root@kuangshen dockerfile]# docker run 3c4c9621ed91
.
..
.dockerenv
bin
dev
etc
home
lib
lib64
lost+found
media
mnt
opt
proc
root
run
sbin
srv
sys
tmp
usr
var
[root@kuangshen dockerfile]#
```



如果在运行镜像时增加一个命令-l，此时镜像中的ENTRYPOINT命令被执行，ENTRYPOINT命令会将-l命令追加到["ls","-a"]后，最后变成ls -al，因为ls -al是正确命令，所以正常打印。

```
[root@kuangshen dockerfile]# docker run 3c4c9621ed91 -l
total 56
drwxr-xr-x  1 root root 4096 May 15 13:15 .
drwxr-xr-x  1 root root 4096 May 15 13:15 ..
-rwxr-xr-x  1 root root   0 May 15 13:15 .dockerenv
lrwxrwxrwx  1 root root   7 May 11 2019 bin -> usr/bin
drwxr-xr-x  5 root root 340 May 15 13:15 dev
drwxr-xr-x  1 root root 4096 May 15 13:15 etc
drwxr-xr-x  2 root root 4096 May 11 2019 home
lrwxrwxrwx  1 root root   7 May 11 2019 lib -> usr/lib
lrwxrwxrwx  1 root root   9 May 11 2019 lib64 -> usr/lib64
drwx----- 2 root root 4096 Jan 13 21:48 lost+found
drwxr-xr-x  2 root root 4096 May 11 2019 media
drwxr-xr-x  2 root root 4096 May 11 2019 mnt
drwxr-xr-x  2 root root 4096 May 11 2019 opt
dr-xr-xr-x 118 root root   0 May 15 13:15 proc
dr-xr-xr-x  2 root root 4096 Jan 13 21:49 root
drwxr-xr-x 11 root root 4096 Jan 13 21:49 run
lrwxrwxrwx  1 root root   8 May 11 2019 sbin -> usr/sbin
drwxr-xr-x  2 root root 4096 May 11 2019 srv
dr-xr-xr-x 13 root root   0 Mar 23 14:00 sys
drwxrwxrwt  7 root root 4096 Jan 13 21:49 tmp
drwxr-xr-x 12 root root 4096 Jan 13 21:49 usr
drwxr-xr-x 20 root root 4096 Jan 13 21:49 var
[root@kuangshen dockerfile]#
```