

Docker file

Saturday, 3 August 2019 11:03 PM

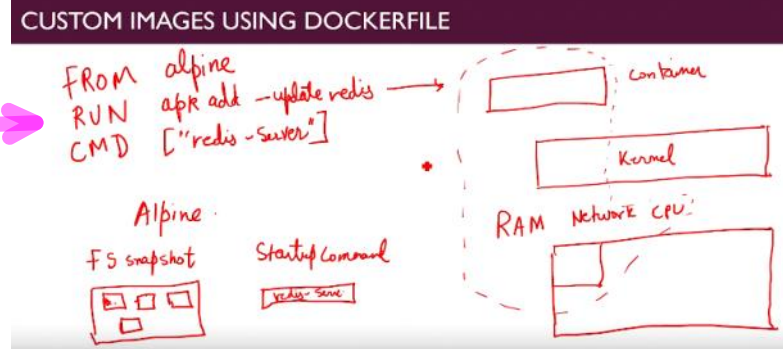
Dockerfile : It contains all the info for running Software in base container.

Dockerfile talks to docker client which talk to Docker server and docker server will create a usable image.

How to create custom image?

1. Choose a base image.
2. Run commands for your software's.
3. Specify the base command to be run at start-up.

```
datafiles ▶ Dockerfile
1 # Specify the base image
2 FROM alpine
3
4 # Download and install dependencies
5 RUN apk add --update redis
6
7 # Startup command
8 CMD ["redis-server"]
```



```
njain50@ubuntu:~/dockerdemo$ docker build .
Sending build context to Docker daemon 2.048kB
Step 1/3 : FROM alpine
latest: Pulling from library/alpine
050382585609: Pull complete
Digest: sha256:6a92cd1fcdc8d8cdec60f33dda4db2cb1fcdccacf3410a8e05b3741f44a9b5998
Status: Downloaded newer image for alpine:latest
----> b7b28af77ffe
Step 2/3 : RUN apk add --update redis
----> Running in b946e9afd90c
fetch http://dl-cdn.alpinelinux.org/alpine/v3.10/main/x86_64/APKINDEX.tar.gz
fetch http://dl-cdn.alpinelinux.org/alpine/v3.10/community/x86_64/APKINDEX.tar.gz
(1/1) Installing redis (5.0.5-r0)
Executing redis-5.0.5-r0.pre-install
Executing redis-5.0.5-r0.post-install
Executing busybox-1.30.1-r2.trigger
OK: 7 MiB in 15 packages
Removing intermediate container b946e9afd90c
----> 865bd08a4598
Step 3/3 : CMD ["redis-server"]
----> Running in 17d44c168eca
Removing intermediate container 17d44c168eca
----> 652335b1bbdd
Successfully built 652335b1bbdd
njain50@ubuntu:~/dockerdemo$
```

Screen clipping taken: 3/8/2019 11:36 PM

Now we can run our own redis:

```
njain50@ubuntu:~/dockerdemo$ docker run 652335b1bbdd
1:C 03 Aug 2019 15:28:57.397 # oOoOoOoOoOoOo Redis is starting oOoOoOoOoOoOo
1:C 03 Aug 2019 15:28:57.397 # Redis version=5.0.5, bits=64, commit=47edd290, modified=0, pid=1, just started
1:C 03 Aug 2019 15:28:57.397 # Warning: no config file specified, using the default config. In order to specify a config file use redis-server /path/to/redis.conf
1:M 03 Aug 2019 15:28:57.399 * Increased maximum number of open files to 10032 (it was originally set to 1024).
1:M 03 Aug 2019 15:28:57.400 * Running mode=standalone, port=6379.
1:M 03 Aug 2019 15:28:57.400 # WARNING: The TCP backlog setting of 511 cannot be enforced because /proc/sys/net/core/somaxconn is set to the lower value of 128.
1:M 03 Aug 2019 15:28:57.400 # Server initialized
1:M 03 Aug 2019 15:28:57.400 # WARNING overcommit_memory is set to 0! Background save may fail under low memory condition. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and then reboot or run the command 'sysctl vm.overcommit_memory=1' for this to take effect.
1:M 03 Aug 2019 15:28:57.400 # WARNING you have Transparent Huge Pages (THP) support enabled in your kernel. This will create latency and memory usage issues with Redis. To fix this issue run the command 'echo never > /sys/kernel/mm/transparent_hugepage/enabled' as root, and add it to your /etc/rc.local in order to retain the setting after a reboot. Redis must be restarted after THP is disabled.
1:M 03 Aug 2019 15:28:57.400 * Ready to accept connections
```