Docker Meetup Series : Second Meetup

Part II : Docker Deep Dive

By Akshay Ithape - DevOps Engineer

Session Agenda

Part 1 (Hands-On) :
- Recap: Docker Architecture
- Dockerfile
- Dockerfile instructions
- Hands-on labs

Break : 15 Mins

Part 2 (Hands-On) :
- Docker Volumes
- Docker Networking

Part 3 :
- Q&A Session
- Quiz
- Closing Note

$whoami

Akshay Ithape, CKA/AD,AWS(2x),RedHat(2x),Terraform

DevOps Engineer @ **Eastern Enterprise** , Pune
empowering your software

Passionate About &

Writer @ **OpenSource** ForU.com
The complete portal on open source

I truly believes in Open Source so I like to share my knowledge with community in as many ways possible and helping people.
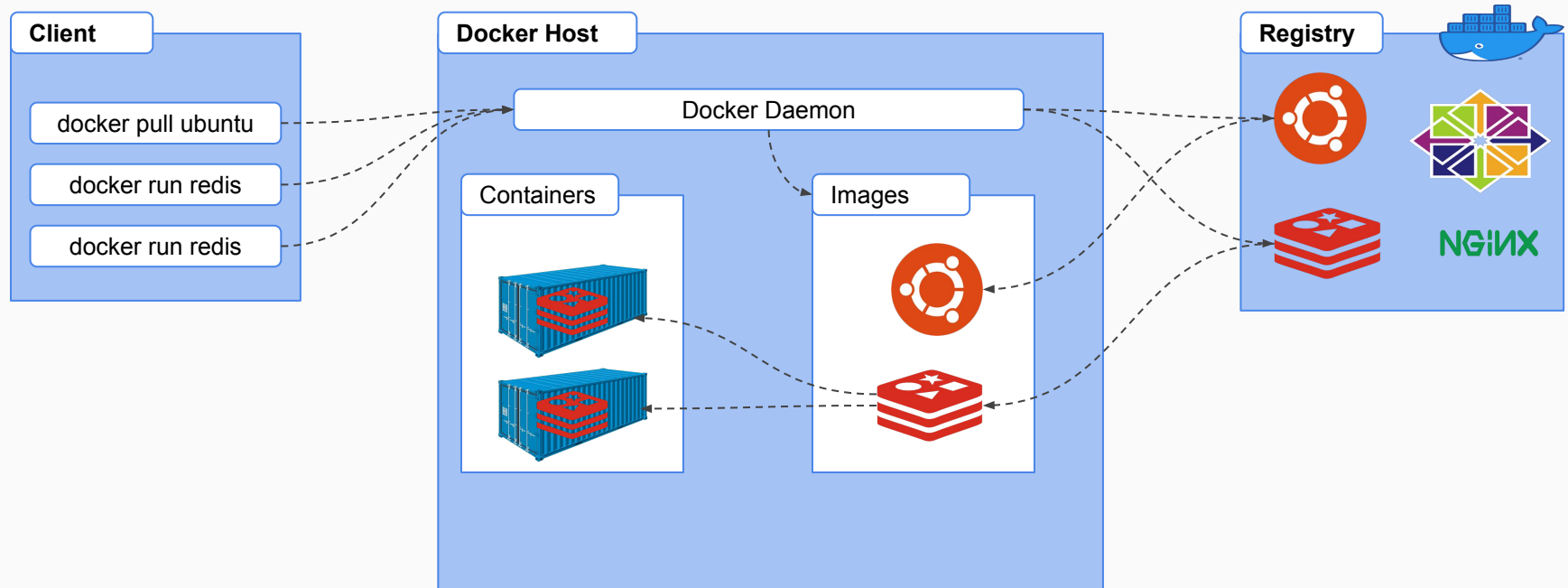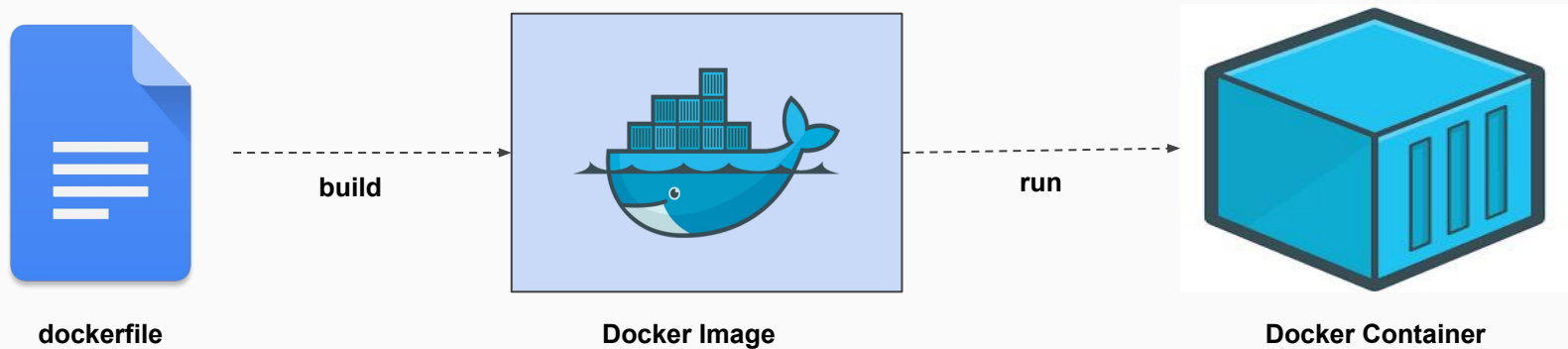
akshayithape   akshayithape-devops   akshayithape-devops

Recap : Docker Architecture

Dockerfile

How To Build Docker Image ?

dockerfile → build → Docker Image → run → Docker Container

Dockerfile

- Dockerfile is a text document containing set of instructions/commands to build a docker image.

- The docker build command builds an image from a Dockerfile and context.

- The build is run by docker daemon not by docker client. Docker Client send all the files/context from the path to daemon.

Dockerfile Format

```
# comment
INSTRUCTION arguments
OR
COMMAND arguments

# Example
RUN echo 'hello'
```

docker build -f dockerfile-name -t image-tag-name .

Commonly Used Dockerfile Instructions

FROM

RUN

CMD

LABEL

EXPOSE
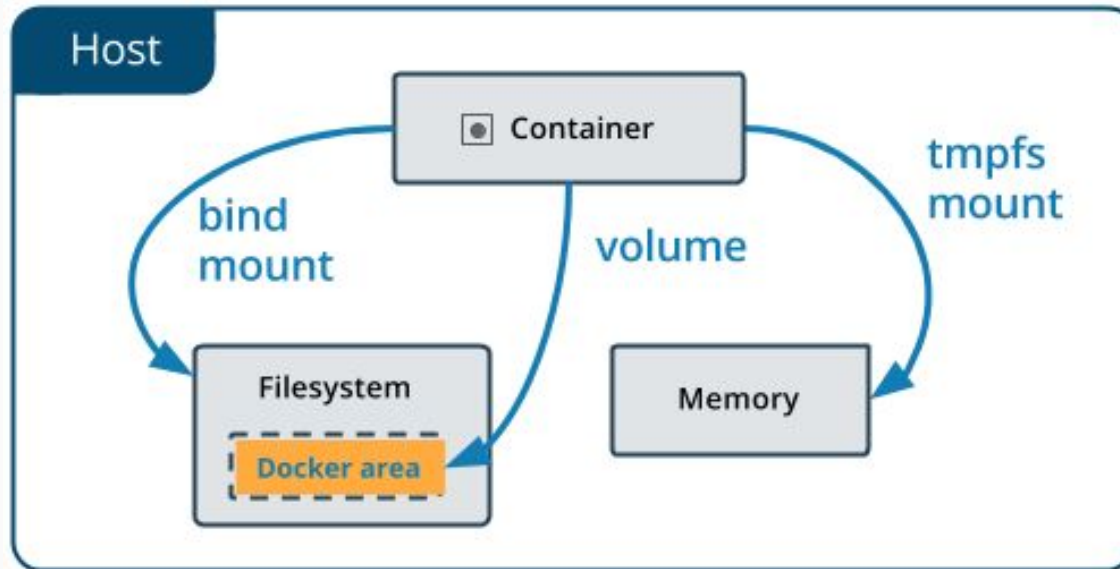
ENV

ADD

COPY

USER

VOLUME

WORKDIR

ENTRYPOINT

Hands-On Labs

Docker Volumes

Docker Volumes

Docker Volumes

- Volumes are stored as part of host file system but managed by Docker. For e.g. in Linux it is stored at /var/lib/docker/volumes.

- Volumes can be created explicitly using docker volume create or docker will create at the time of container creation if specified in the docker run command.

- When the volume is mounted in a container, It's the directory which is created by docker volume is actually mounted

- A volume can be mounted to multiple containers. Volume is not removed on removal of containers. It has to be explicitly removed using docker volume prune command.

Docker Networking

Docker's networking subsystem is pluggable, using drivers which are as follows:

- Bridge
- User Defined Bridge
- Host
- Overlay
- ipvlan
- Macvlan
- None

Hands-On Labs

Github Repository

https://github.com/akshayithape-devops/Mastering-Docker

Part I - Docker Deep Dive

Share

konf.me/q351706

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351706

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Q&A Session

Reference Link

- https://www.statista.com/statistics/1256245/containerization-technologies-software-market-share/
- https://docs.docker.com/get-started/overview
- https://www.techtarget.com/searchitoperations/feature/Dive-into-the-decades-long-history-of-container-technology

Thank You EveryOne

Be In Touch

Linkedin : https://www.linkedin.com/in/akshayithape/

GitHub : https://github.com/akshayithape-devops

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Part III : Docker Deep Dive