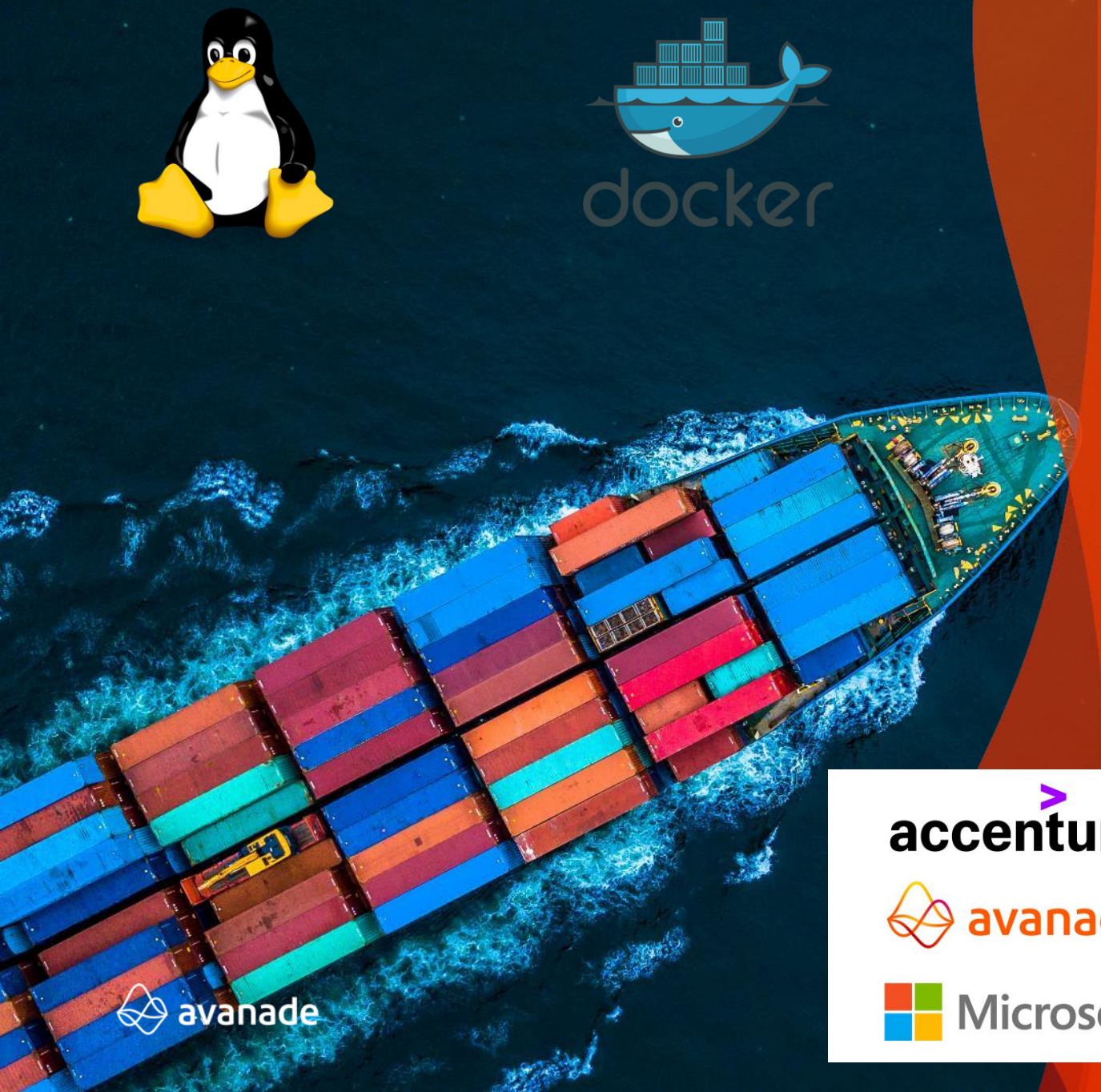

TechTalk #1

Container com Docker e WSL2

Docker Compose

accenture

avanade

Microsoft

Felipe Augusto

Reginal Talent Community Leader

Back-end

Still Developer and Architecture

https://www.linkedin.com/in/felipementel

https://github.com/felipementel

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>1 | Apresentação

Felipe Augusto

- +18 anos de experiência;
- Especialista .NET, mas apaixonado por todas as linguagens!
- Programador!
- Apaixonado por sistemas críticos que precisam de performance, alto desempenho e alta disponibilidade;
- Gerenciamento de projetos utilizando diversos frameworks ágeis e tradicionais;
- Tenho algumas certificações Microsoft, estou como MCT e tenho outras de agilidade e DevOps.

slido

Docker faz parte da minha vida?

ⓘ Start presenting to display the poll results on this slide.

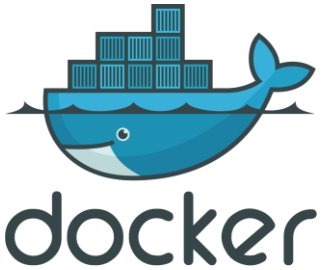
Agenda

01

Windows Subsystem for Linux 2

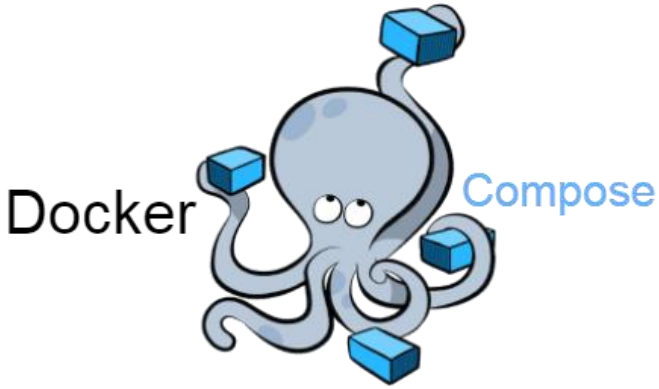
02

Docker



03

Docker Compose



Docker Swarm

.dockerignore

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WSL2

Chegou a hora do Linux dentro do Windows

- Algumas opções de distro;
- Terminal Bash dentro do Windows;
- Possibilidade de compartilhar o uso de arquivos e pastas.

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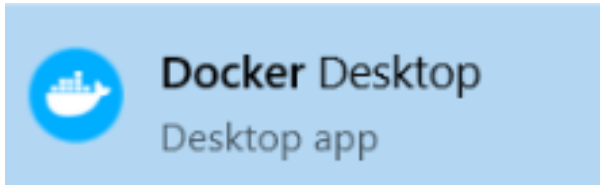
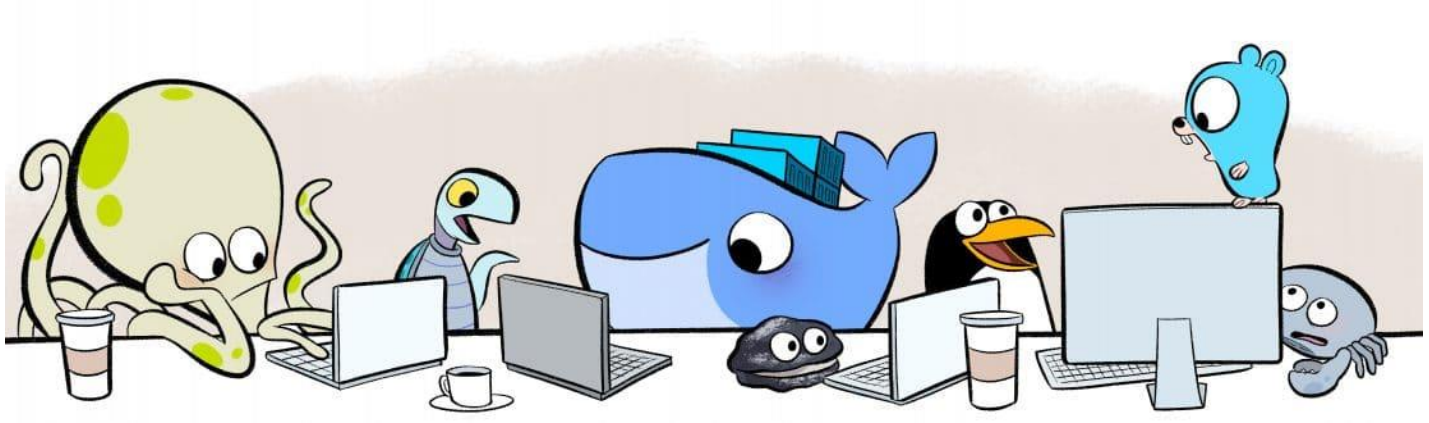
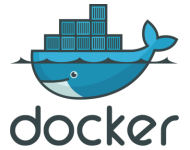
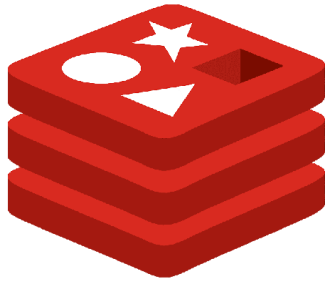




Desde 31 de agosto de 2021 com carência até 31 de janeiro de 2022

- O Docker Desktop permanece gratuito para pequenas empresas (menos de 250 funcionários e menos de US$ 10 milhões em receita anual). Requer uma assinatura paga (Pro, Team ou Business), a partir de US$ 5 por usuário por mês, para uso profissional em empresas maiores.
- Para uso pessoal, educação e projetos de código aberto não comerciais, pode ser utilizado de forma gratuita.





docker

MariaDB

Microsoft SQL Server

RabbitMQ

.NET

kafka

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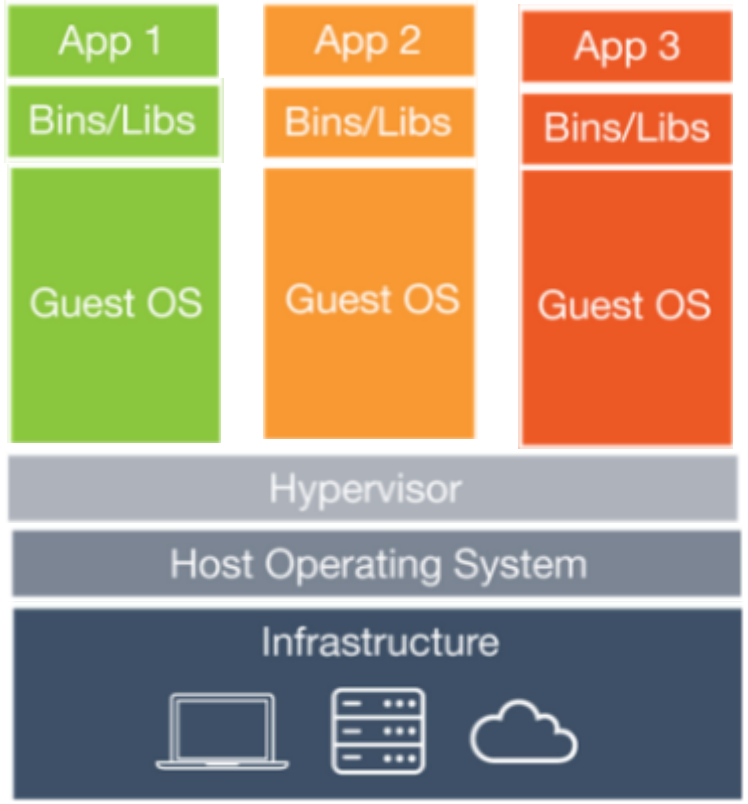
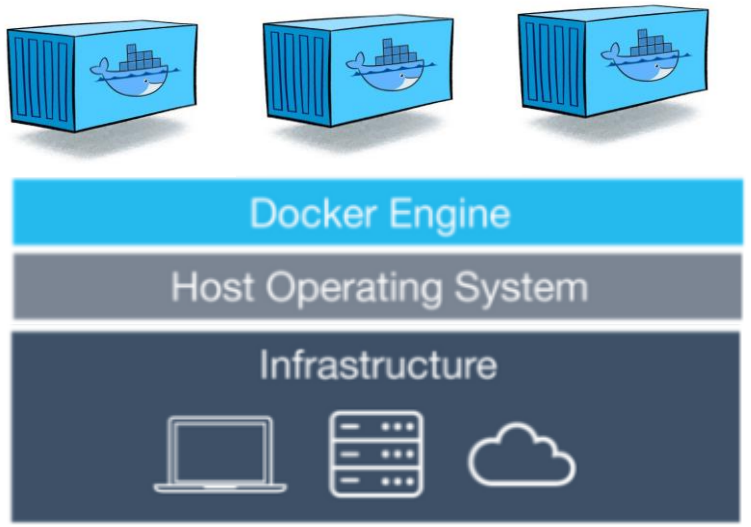
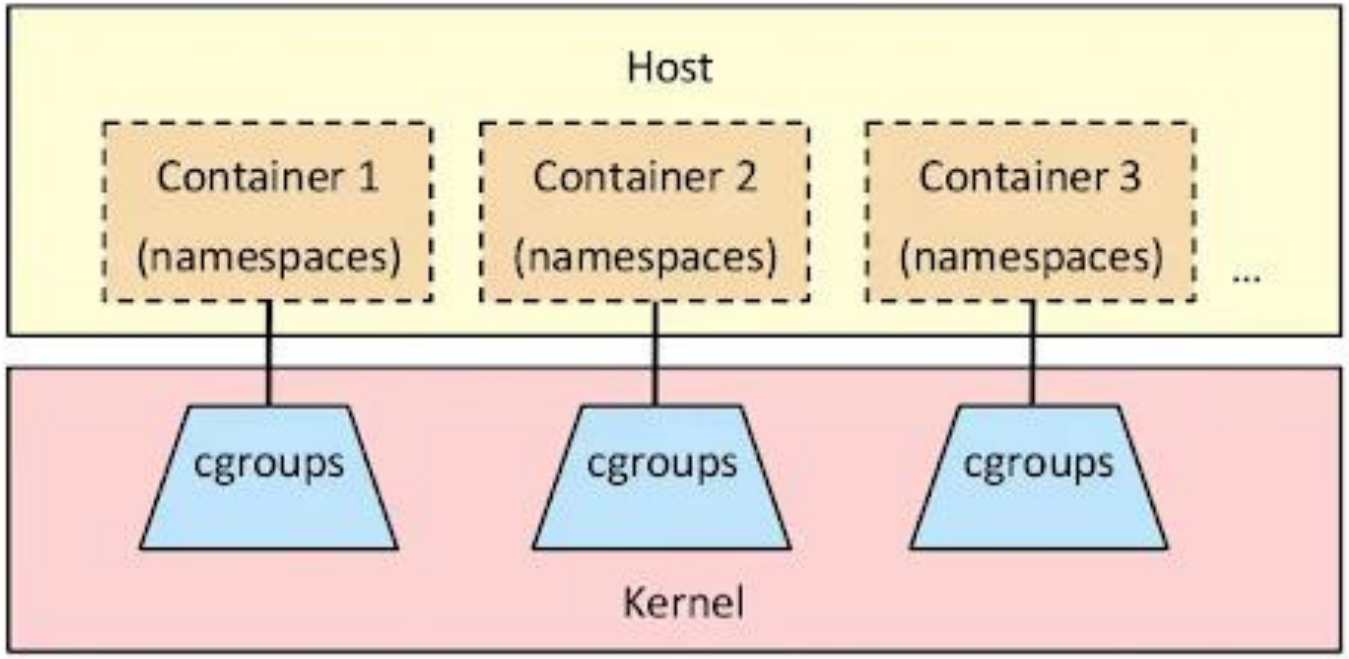
VM e Docker



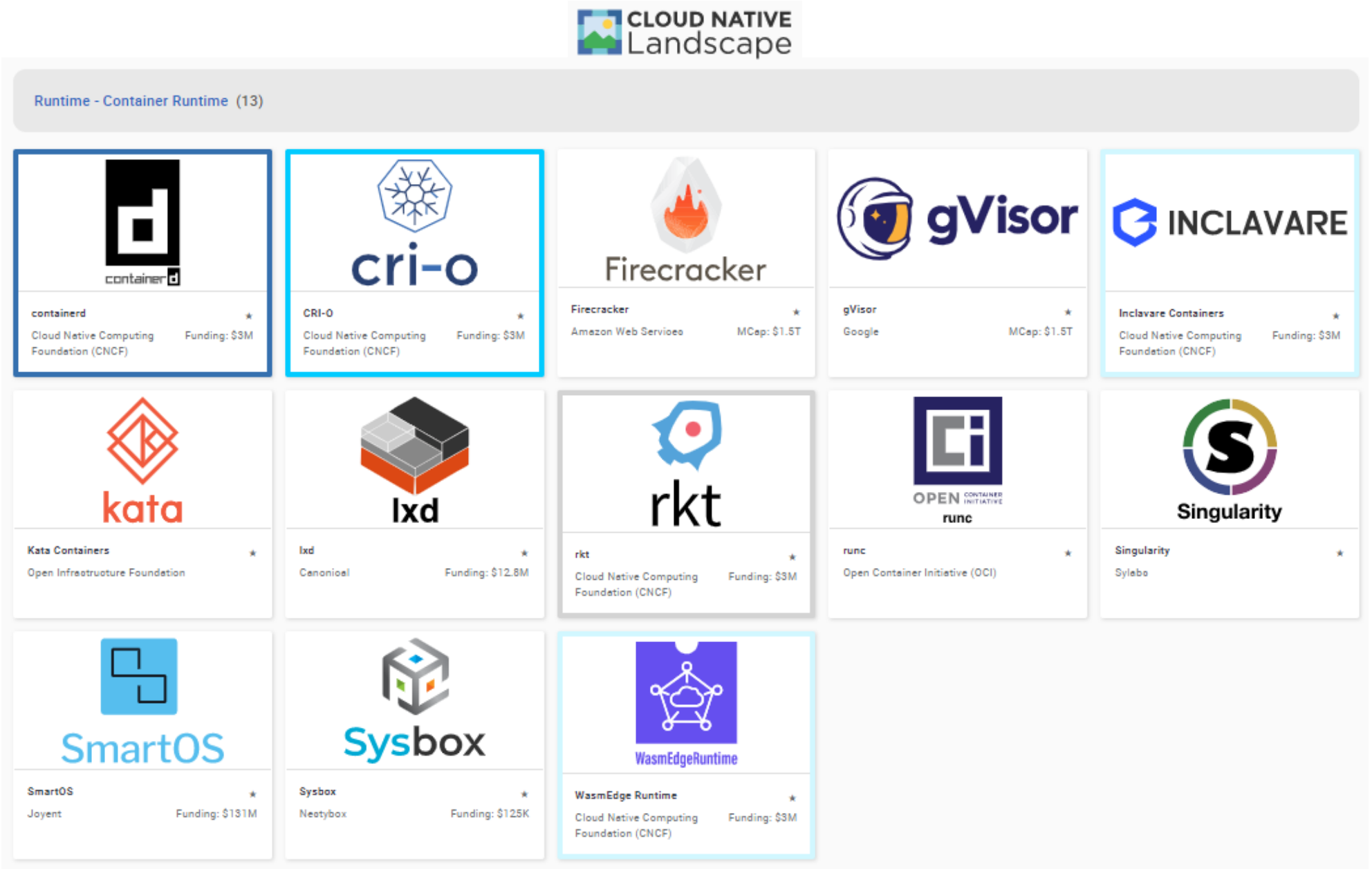


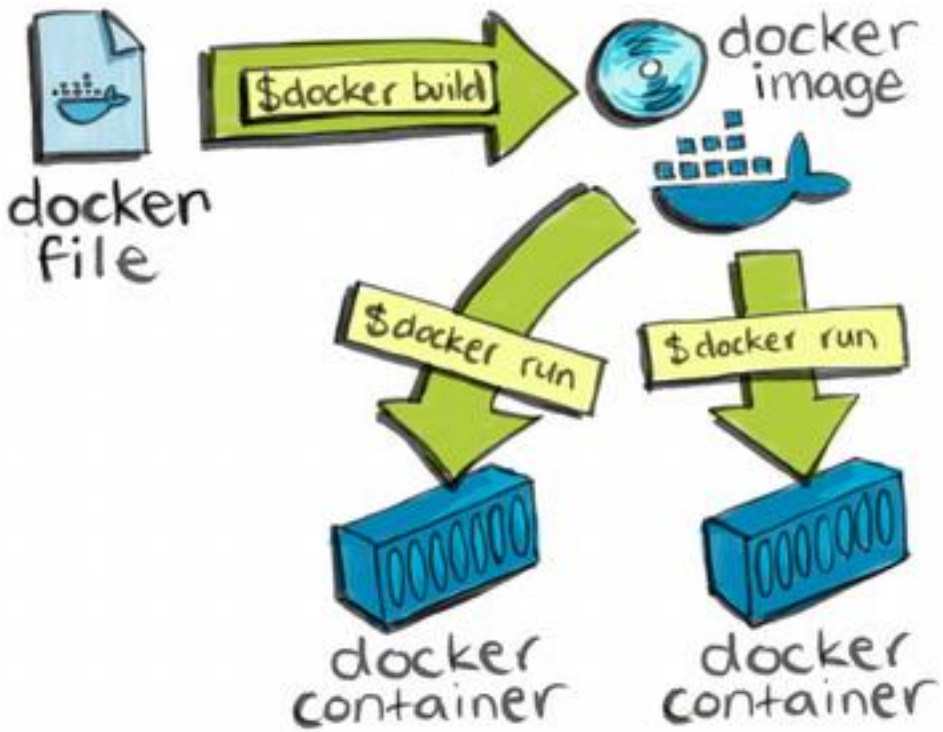
Linux Containers

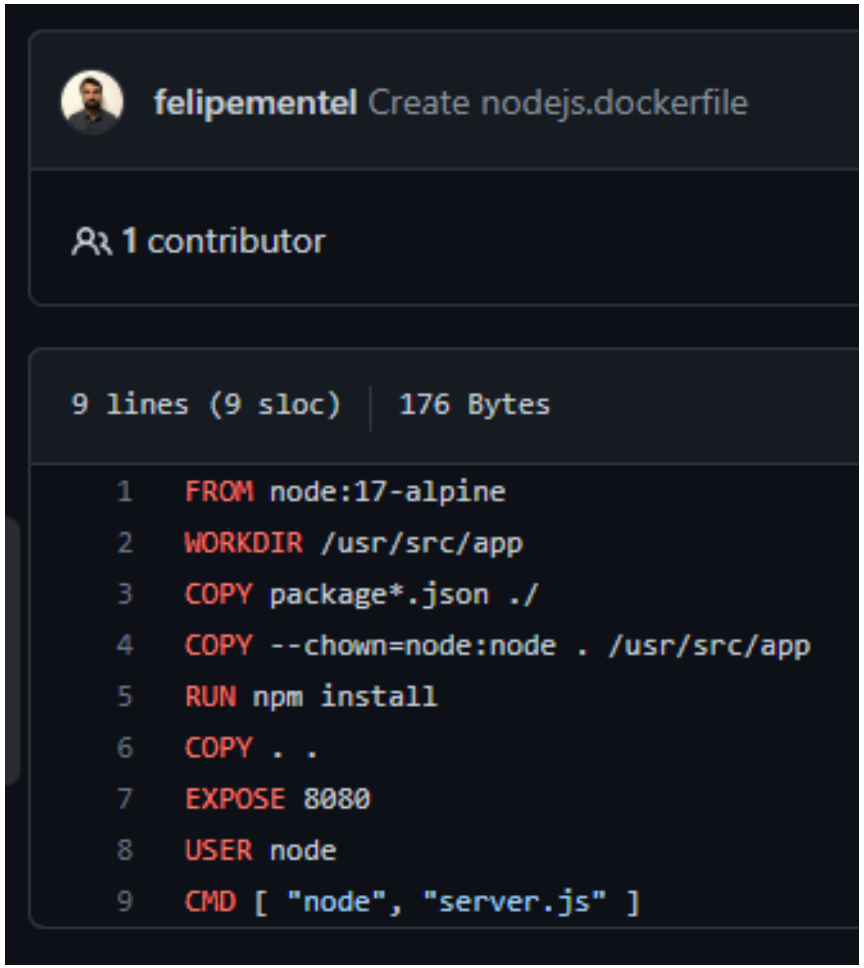
Container = combination of namespaces & cgroups



- Namespaces:: Capacidade de isolar processos
- Cgroups:: Gerencimanto de recursos entre processos (CPU, Memória, Storage, Network)





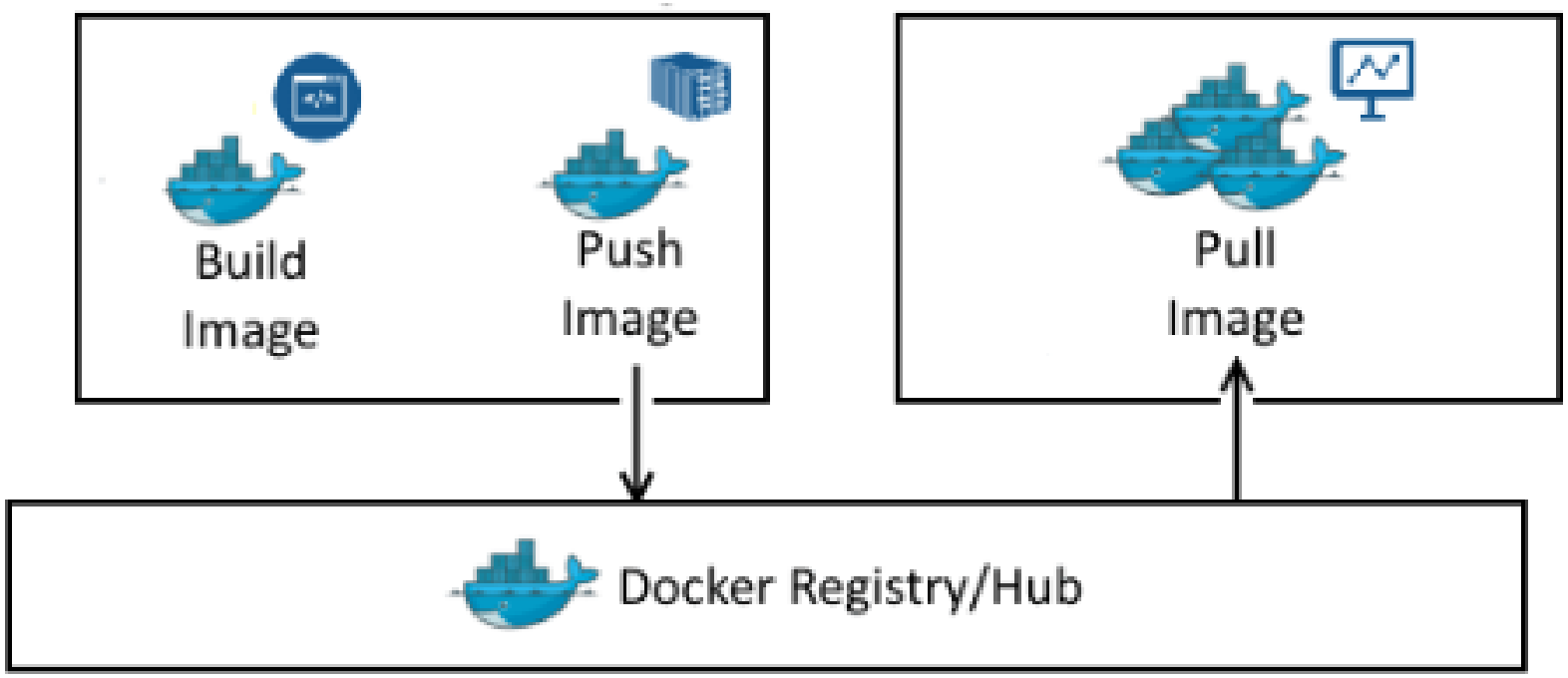


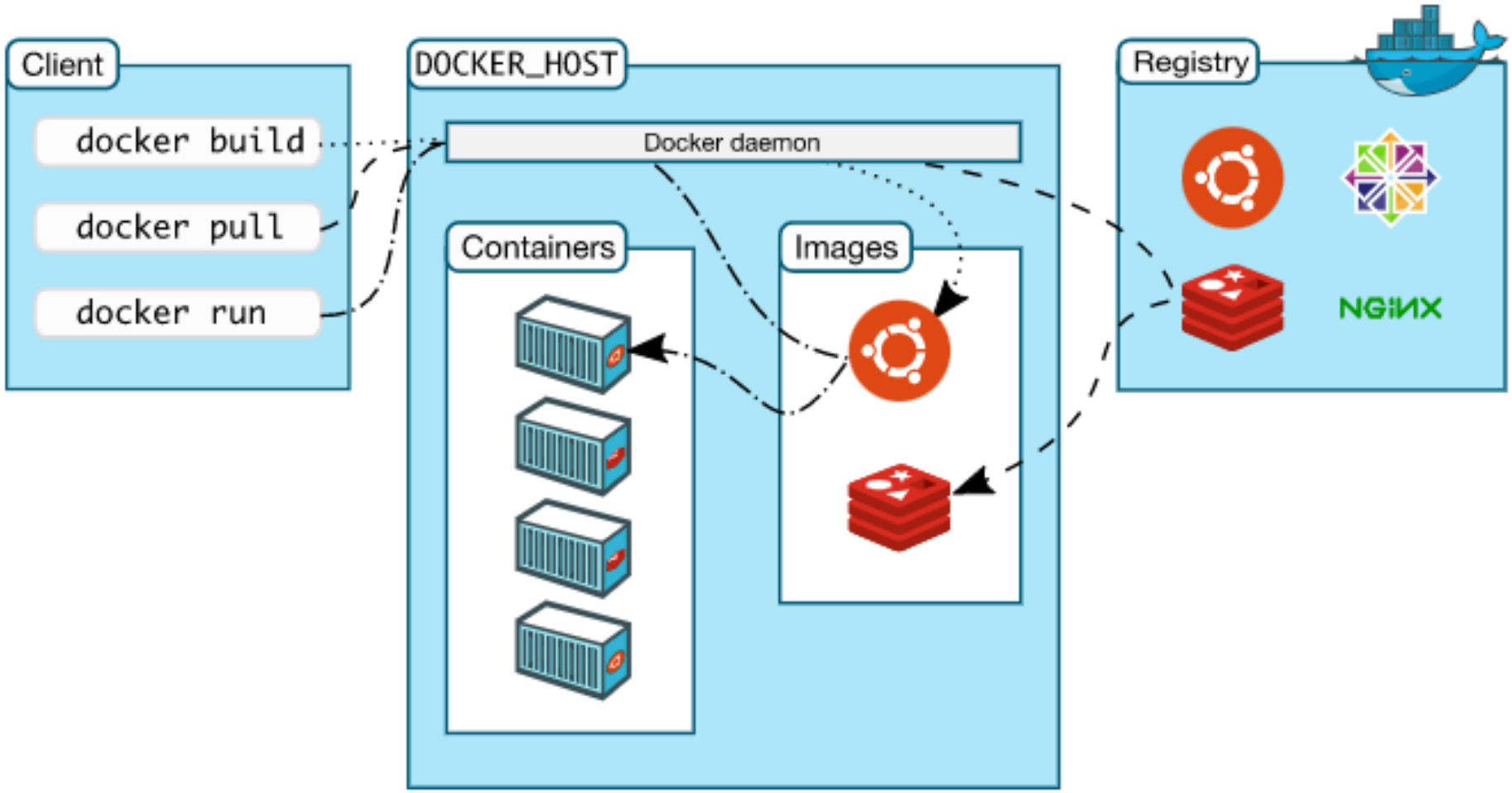
felipementel Create nodejs.dockerfile

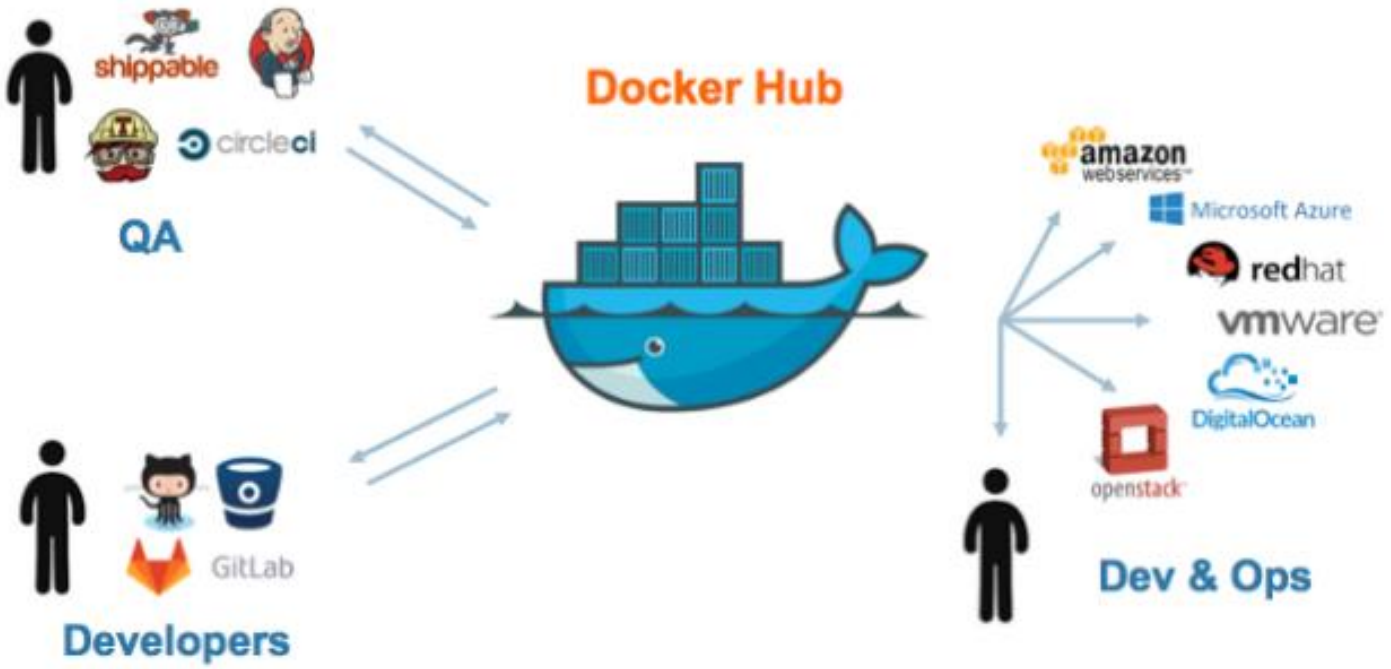
1 contributor

9 lines (9 sloc) | 176 Bytes

```
1  FROM node:17-alpine
2  WORKDIR /usr/src/app
3  COPY package*.json ./
4  COPY --chown=node:node . /usr/src/app
5  RUN npm install
6  COPY . .
7  EXPOSE 8080
8  USER node
9  CMD [ "node", "server.js" ]
```



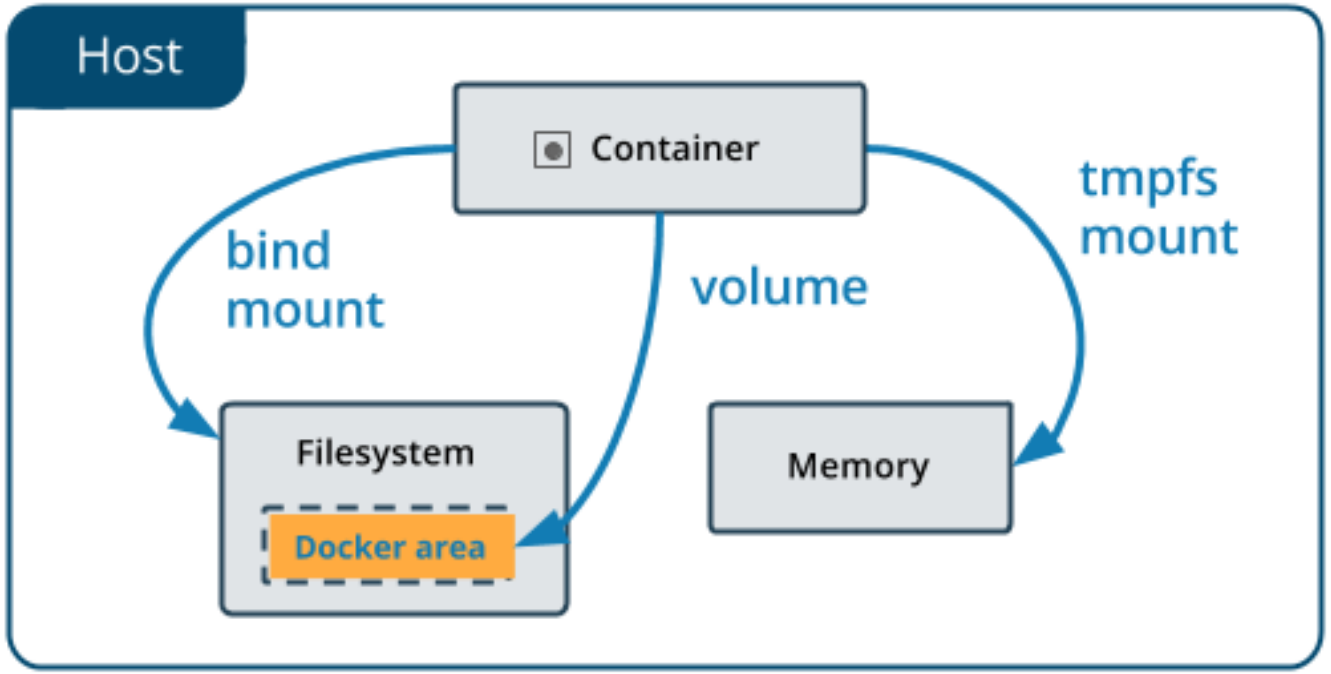




NGINX

sonarqube

avanade



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Bridge:: Driver padrão. Utilizando para comunicar containers

Host:: Utilizado entre o container e o host

Overlay:: Para conexão entre docker deamons

Ipvlan:: Para controle total sobre IPv4 e IPv6. Driver VLAN L2 ou L3

Macvlan:: Para atribuir endereço MAC e utiliza-lo para rotear o tréfego

None:: Para desativar rodas as redes

- build
- commit
- exec
- images
- inspect
- logs
- pull
- push
- rm
- rmi
- start
- stop
- tag

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Docker  Compose

felipementel Update infra-on-docker.yml

1 contributor

35 lines (31 sloc) | 678 Bytes

```yaml
version: '3.1'

services:
  potato-sonarqube:
    image: sonarqube:9.4.0-developer
    restart: always
    container_name: sonarqube-potato
    ports:
      - 9044:9000

  potato-postgres:
    image: postgres:14.2-alpine
    restart: always
    container_name: potato-postgres
    environment:
      POSTGRES_PASSWORD: example
      POSTGRES_USER: user01
      POSTGRES_DB: PotatoDatabase
    networks:
     - potato-net

  potato-adminer:
    image: adminer:4.8.1-standalone
    container_name: adminer-potato
    restart: always
    ports:
      - 9045:8080
    depends_on:
      - potato-postgres
    networks:
     - potato-net

networks:
  potato-net:
    driver: bridge
```

Referencias

- https://docs.microsoft.com/en-us/windows/wsl/install
- https://docs.docker.com/get-started/
- https://docs.docker.com/engine/reference/commandline/cli/
- https://docs.docker.com/compose/reference/
- https://landscape.cncf.io/card-mode?category=container-runtime&grouping=category
- https://docs.docker.com/get-started/overview/#the-docker-daemon
- https://www.docker.com/blog/updating-product-subscriptions/
- https://docs.docker.com/storage/volumes/
- https://docs.docker.com/network/
- https://github.com/felipementel/Accenture-TechTalk-Container-WSL2-Docker

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Obrigado

Forms

Espero ter contribuido

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