

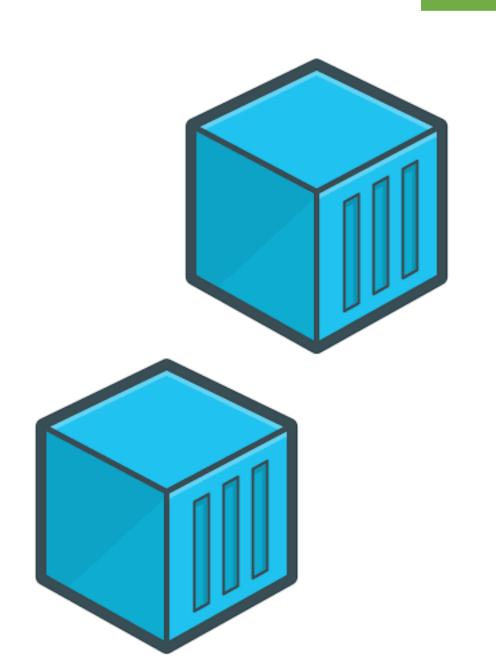
Containers

Conceitos básicos sobre Docker e Kubernetes

O que são containers?

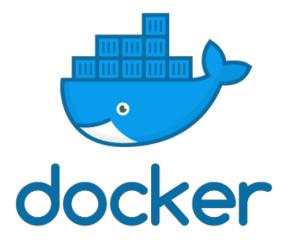
Aplicações virtualizadas

 A container is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another.



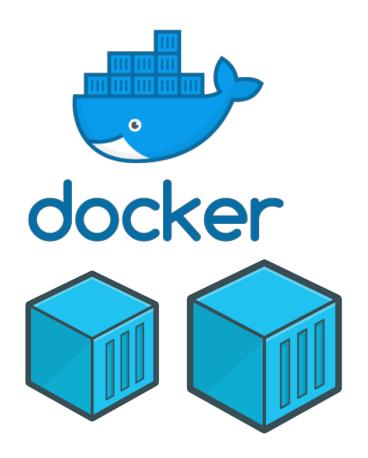
Docker

- Docker engine
- A Docker container image is a lightweight, standalone, executable package of software that includes everything needed to run an application: code, runtime, system tools, system libraries and settings.



Docker-compose e docker swarm

- Services
- Cluster



Ambiente de Produção

- Requisitos básicos
 - Alta disponibilidade
 - Desempenho
 - Escalabilidade
 - Segurança



O que é o Kubernetes?

- Gerenciador de containers
- <u>Kubernetes</u> is an open-source system for automating deployment, scaling, and management of containerized applications.
- Nativo Google

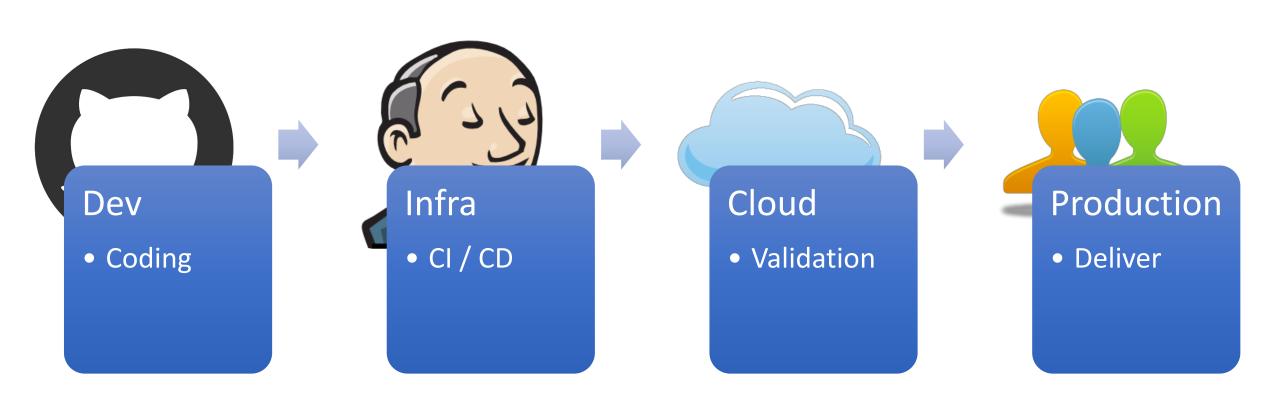


Kubernetes na Cloud

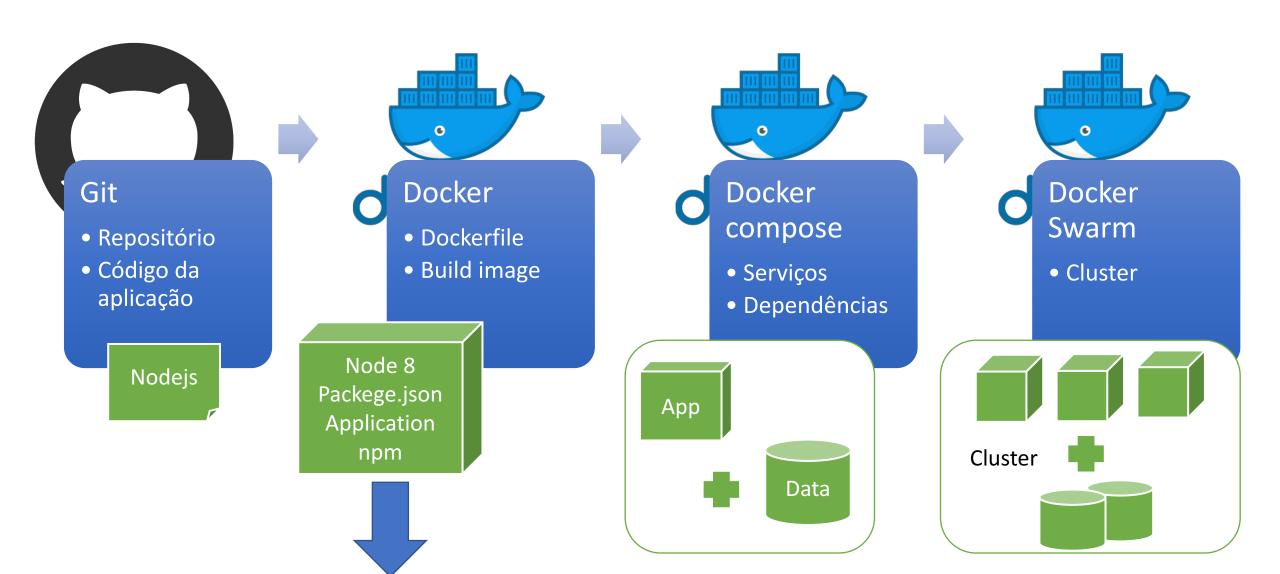
- Administração
- Cloud services
 - GKE (Google)
 - AKS (Azure)
 - EKS (Amazon)



Processo de Deployment



Processo Standalone



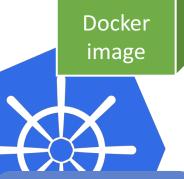
Processo Cloud



Kubernetes

- K8s
- EKS
- AKS
- GKS





Registry

- Imagem docker
- Repositório privado

Container registry

Java Node



Deployments

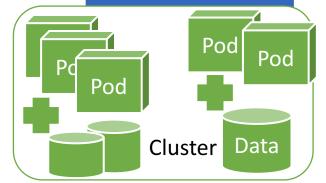
- App Java
- App Node



App Node



- Pods
- Endpoint



Obrigado

- Dúvidas
- Comentários
- Sugestões