Containers Fun

Summary

- What is Container
- What is docker
- Docker Engine
- Docker installation
- Docker Workflows
- Docker-Compose

What is Container

- Standardized packaging for software and related dependencies
- Isolates running apps from each other
- Share same OS Kernel
- CGroups and Kernel Namespaces

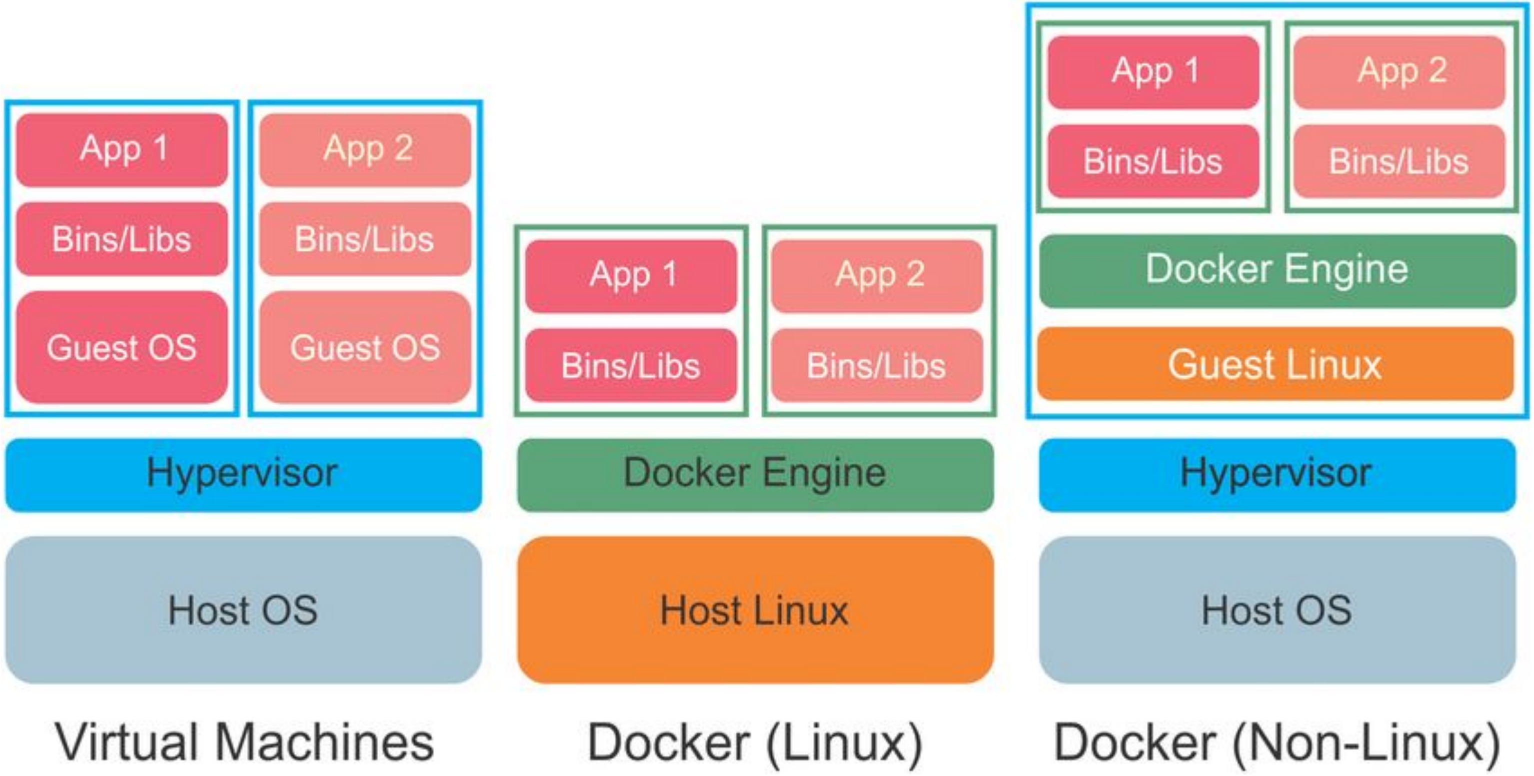
What is Docker

- One of the most common containers providers (LXC, CloudFoundry - Garden…etc)
- Supported Natively By the most used Containers Orchestrator such as K8s
- Supported by the all the cloud providers (AWS, Azure, GCP, Rackspace…etc)

Docker Engine

- Docker Daemon
  - Build Images
  - Run and Manages Containers
  - RESTful API
- Docker CLI
  - *docker build*
  - *docker images*
  - *docker run*
  - *docker ps*
  - *docker stop*
  - *docker rm*
  - *docker rmi*

Docker Architecture



Docker Hub

- Providers Docker Services (Container Registry)
- Libraries and Images
- Automated Builds (Github, BitBucket, GitLab...etc)

Docker Workflow

- Find an image on Container Registry
- Pull the image from Container Registry
- Run the image on Docker Host
- Stop The container
- Remove the container
- Remove the image

Docker-compose

- What is docker-compose
- Why do we need it
- How it helps us being productive

References

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