

DOCKER

Docker is one implementation of container based virtualization technologies.

Hypervisor providers:

- VMware, Virtual Box.
- AWS, Microsoft Azure.

Benefits:

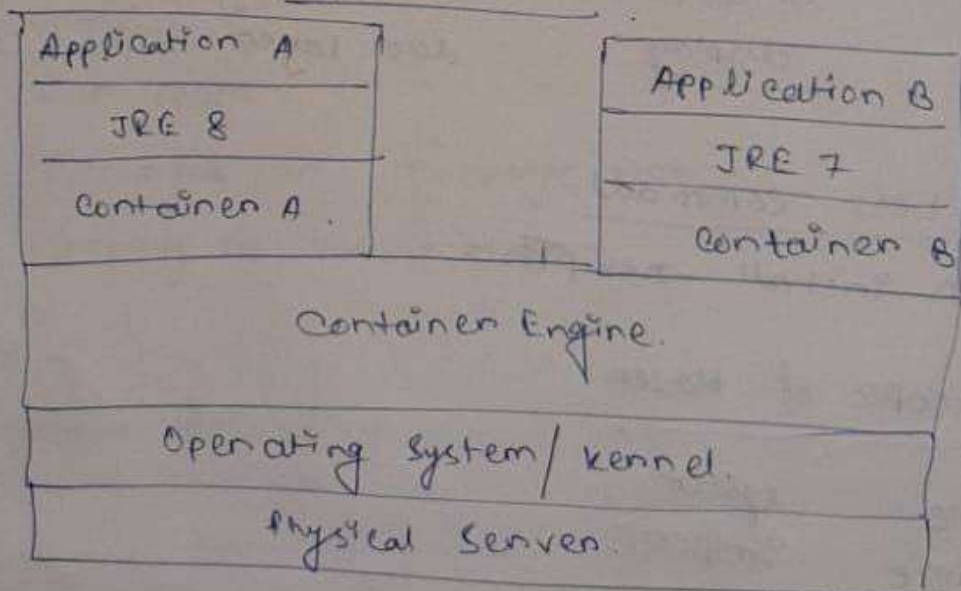
- Cost-Efficient
- Easy to scale

Limitations:

- Kernel Resource Duplication
- Application Portability Issue.

How to run two different Java applications with two different JREs on the same VM?

Runtime Isolation.



container virtualization.

Benefits

- Cost-Efficient
- Fast Deployment
- Guaranteed Portability

Docker Daemon
Docker Engine
Docker server

Docker client can also connect to a remote docker daemon.

Docker daemon can't run on non-linux platforms natively because it uses linux specific kernel features.

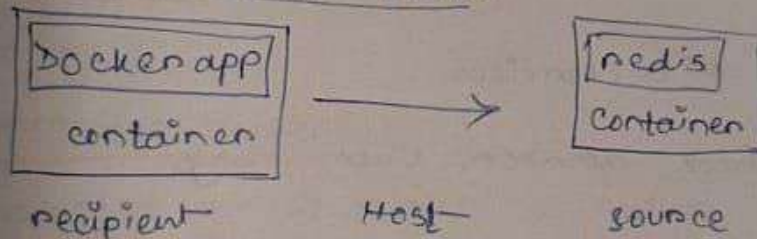
Docker Technology

Images, Containers.

Ways to Build a Docker Image

- Commit changes made in a Docker container.
- Write a Dockerfile.

Docker Container Links



Docker Network types

- closed Network / none network.
- Bridge network
- Host network.
- Overlay network

Tag the docker images with two Tags.

1. ~~Tag~~ Commit hash of the source code.
2. latest.

Why Running Docker Containers inside VMs?

- To address security concerns.
- Hardware level isolation.