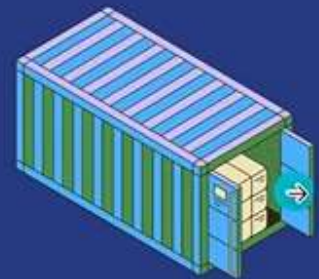


# What is a Docker?

- Docker is a containerization platform for developing, packaging, shipping, and running applications.
- It provides the ability to run an application in an isolated environment called a container.
- Makes deployment and development efficient.



# What is a Container?



- A way to package an application with all the necessary dependencies and configuration.
- It can be easily shared
- Makes deployment and development efficient.

Container

APP1

Lib, Dependencies,  
Tools

Container

APP2

Lib, Dependencies,  
Tools

Container

APP3

Lib, Dependencies,  
Tools

Docker Engine 



Operating System

aws

Hardware



App1



JS V14

App2



JS V16





Container



Container



Docker Engine 

  Operating System 

 Hardware 



Docker Containers	VMs
Low impact on OS, very fast, low disk space usage	High impact on OS, slower, high disk space usage
Sharing, re-building and distribution is easy	Sharing, re-building and distribution is challenging
Encapsulate apps instead of whole machine	Encapsulate whole machine

# Main components of Docker

- DockerFile
- Docker Image
- Docker Container
- Docker Registry





It is a simple text file with instructions to build an image.

Instance of an Image

DockerFile



Image

Single File with all the dep and lib to run the program



Container

Container

Container



# Docker Registry

**A Docker registry is a central repository for storing and distributing Docker images.** 

