Lesson: Docker

July 21, 2021

Docker/Container

- Simply another process on your machine
- Completely isolated from other processes
- Container-isolated file system
- Image contains container file system that is required to run application

Why Docker

- Isolation
- Lightweight
- Simplicity
- Community

Docker CLI

- Docker build
- Docker images
- Docker run
- Docker ps
- Docker stop
- Docker rm
- Docker rmi

Docker Hub

- https://hub.docker.com/
- Singup, you will be creating an image and pushing to docker hub

Image taken from :- https://pointful.github.io/docker-intro/#/6

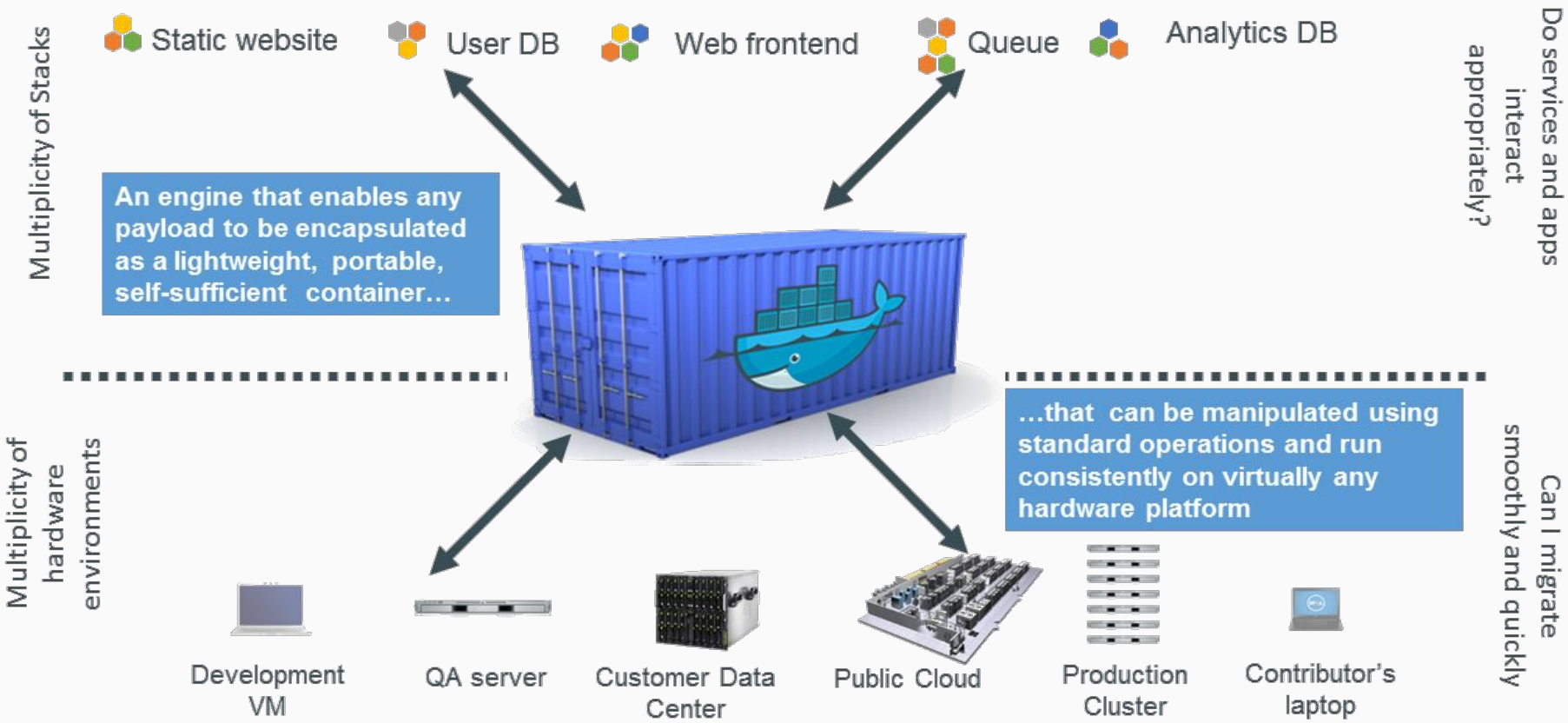
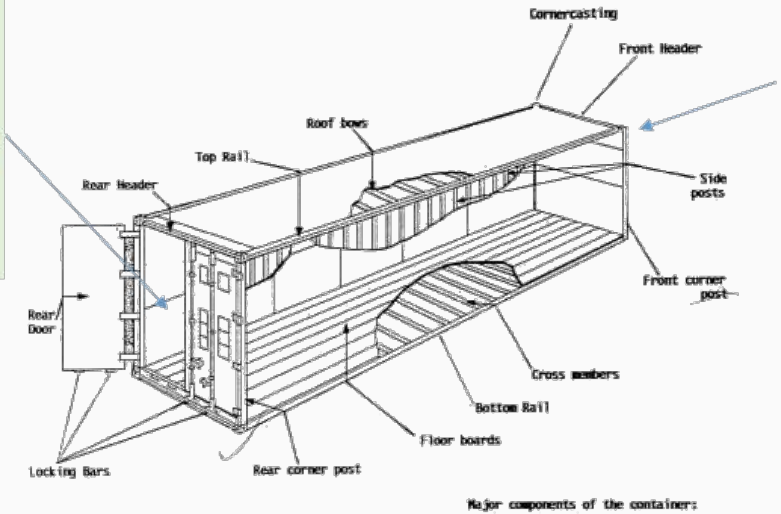


Image taken from :- https://pointful.github.io/docker-intro/#/6

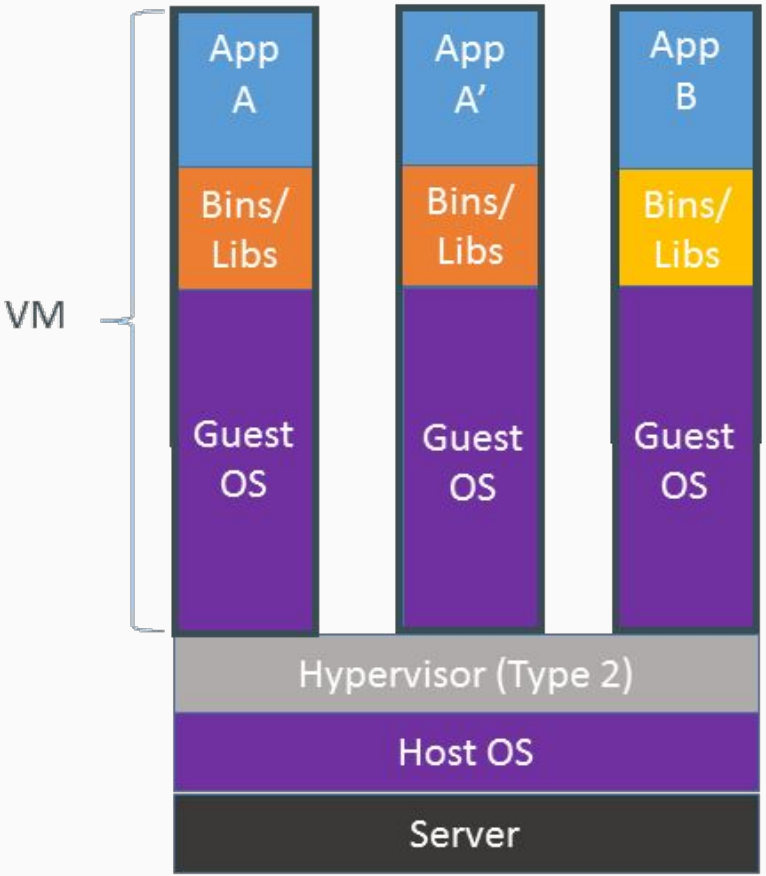
- **Dan the Developer**
  - Worries about what's "inside" the container
    - His code
    - His Libraries
    - His Package Manager
    - His Apps
    - His Data
  - All Linux servers look the same



Major components of the container:

- **Oscar the Ops Guy**
  - Worries about what's "outside" the container
    - Logging
    - Remote access
    - Monitoring
    - Network config
  - All containers start, stop, copy, attach, migrate, etc. the same way

Image taken from :- https://pointful.github.io/docker-intro/#/6



Containers are isolated, but share OS and, where appropriate, bins/libraries

...result is significantly faster deployment, much less overhead, easier migration, faster restart

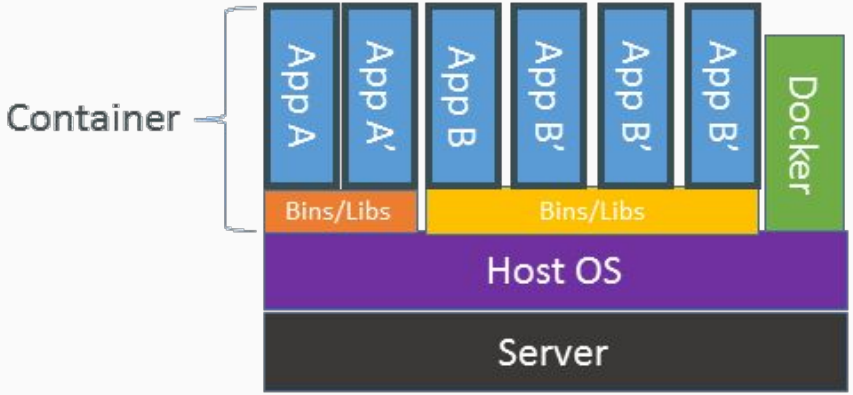


Image taken from :- https://pointful.github.io/docker-intro/#/6

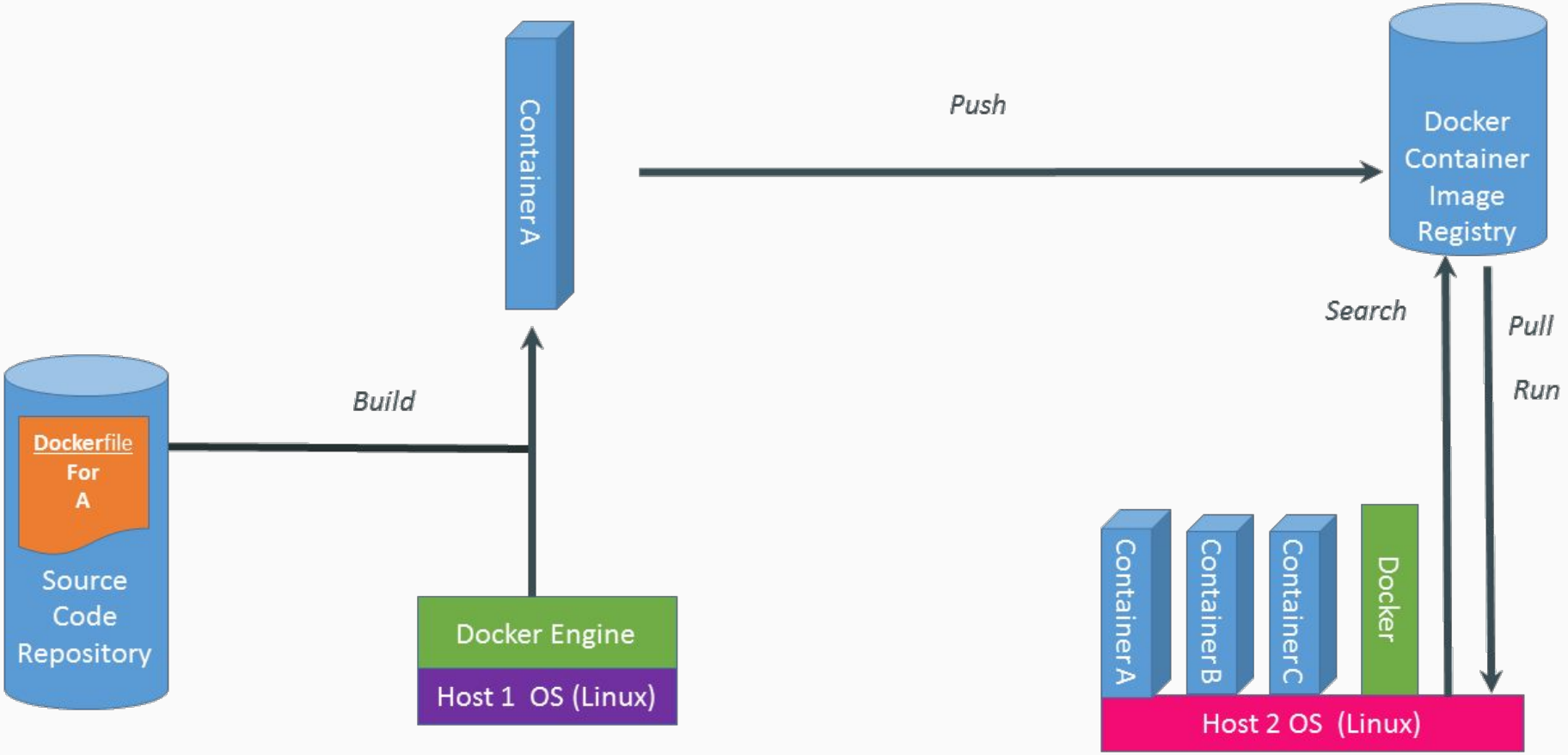


Image taken from :- https://pointful.github.io/docker-intro/#/6