

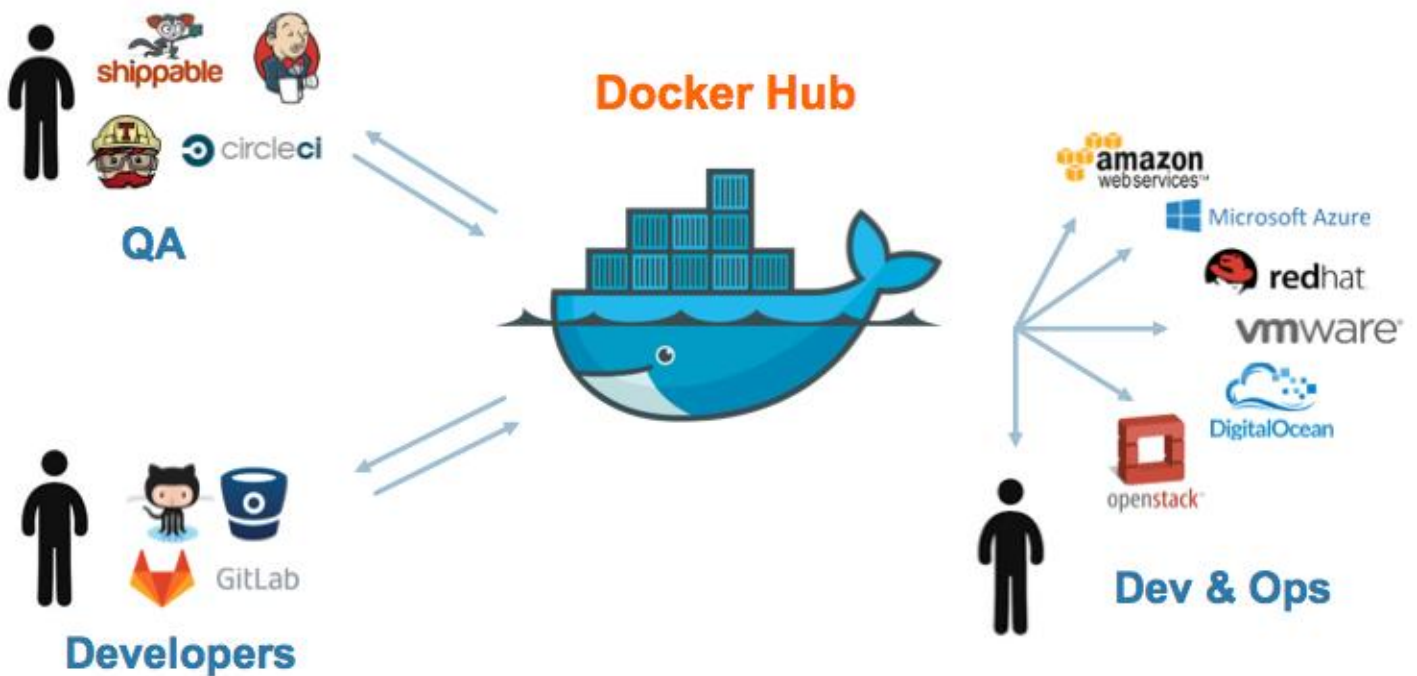
docker

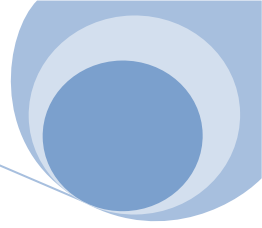
BUILD, SHIP, RUN



WHAT IS DOCKER ??

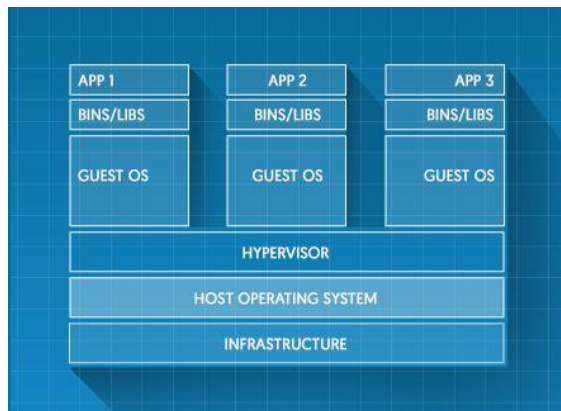
Docker is a tool designed to make it easier to create, deploy, and run applications by using containers. Containers allow a developer to package up an application with all of the parts it needs, such as libraries and other dependencies, and ship it all out as one package. By doing so, thanks to the container, the developer can rest assured that the application will run on any other Linux machine regardless of any customized settings that machine might have that could differ from the machine used for writing and testing the code.



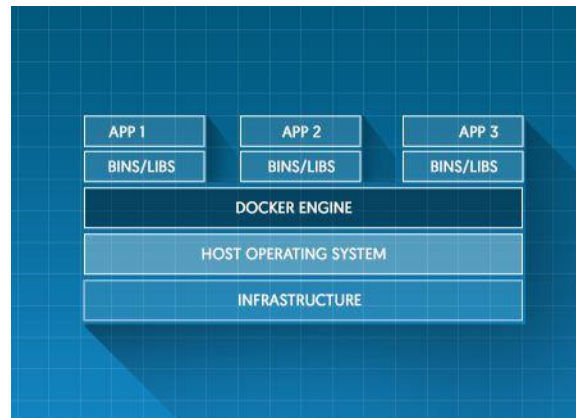


COMPARING CONTAINERS AND VIRTUAL MACHINES

Containers and virtual machines have similar resource isolation and allocation benefits -
- but a different architectural approach allows containers to be more portable and efficient



VIRTUAL MACHINES



CONTAINERS

Day 1: Introduction to Docker

- What is Docker
- Container vs Virtual Machines
- Docker Platform Overview and Terminology
 - Docker Engine
 - Images
 - Containers

- Registry
- Repositories
- Docker Hub
- Docker Orchestration Tools
- Introduction to Images
- Getting Started with Containers

Day 2: Docker Fundamentals

- Building Images
- Dockerfile
- Managing Images and Containers
- Distributing Images on Docker Hub
- Docker Volumes
- Basic Container Networking
- Docker in Continuous Integration

Day 3: Docker Operations

- Troubleshooting Containers
- Overview of Security Practices
- Private Registry
- Introduction to Docker Machine
- Introduction to Docker Swarm
- Introduction to Docker Compose
- Building micro service applications with Docker

