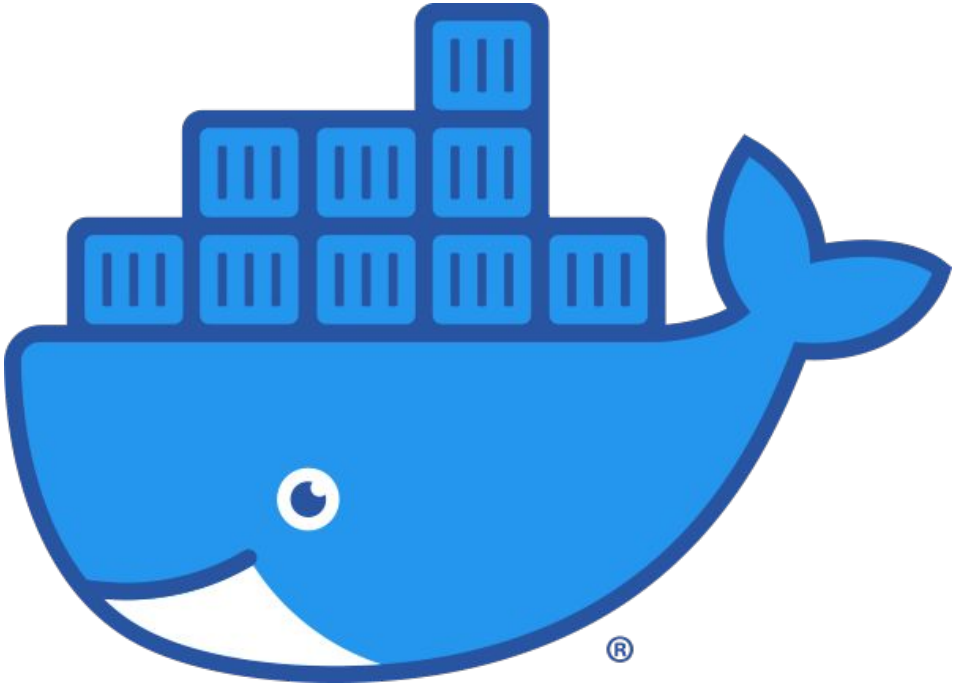
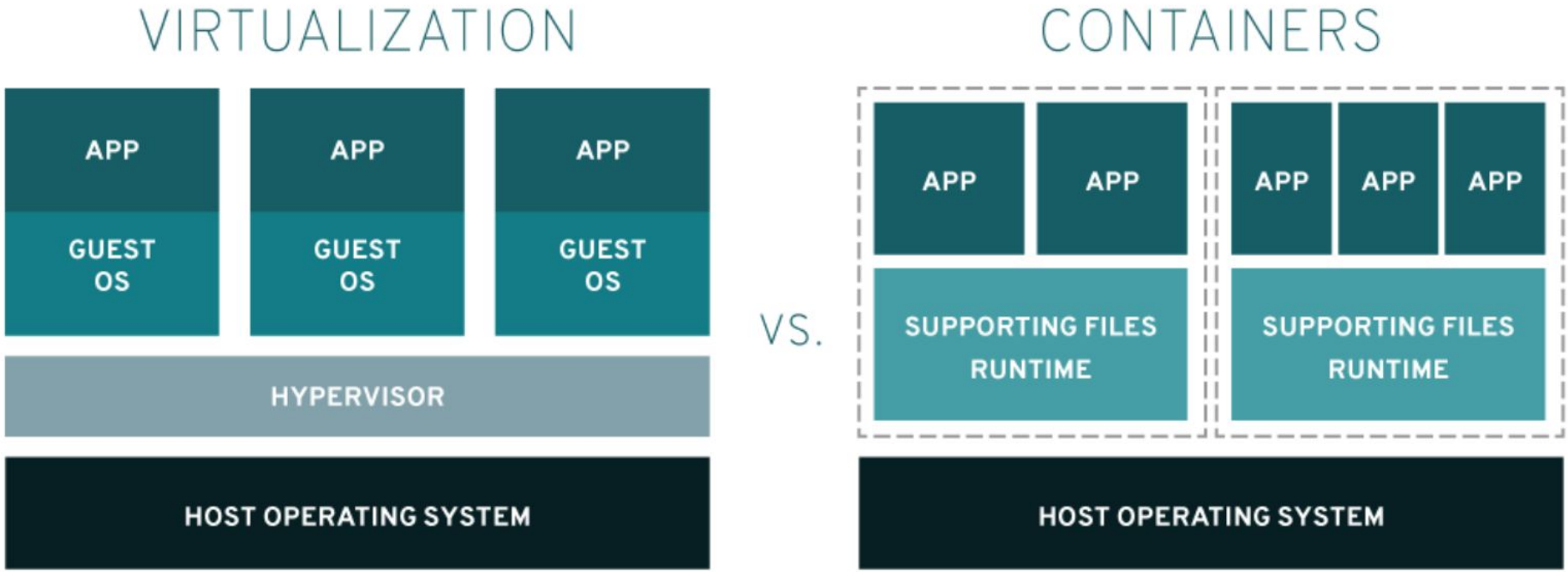
Docker Introduction



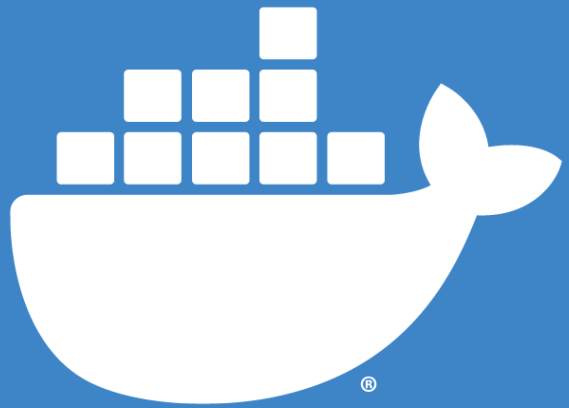
Where does it all started?

Linux Containers (LXC)

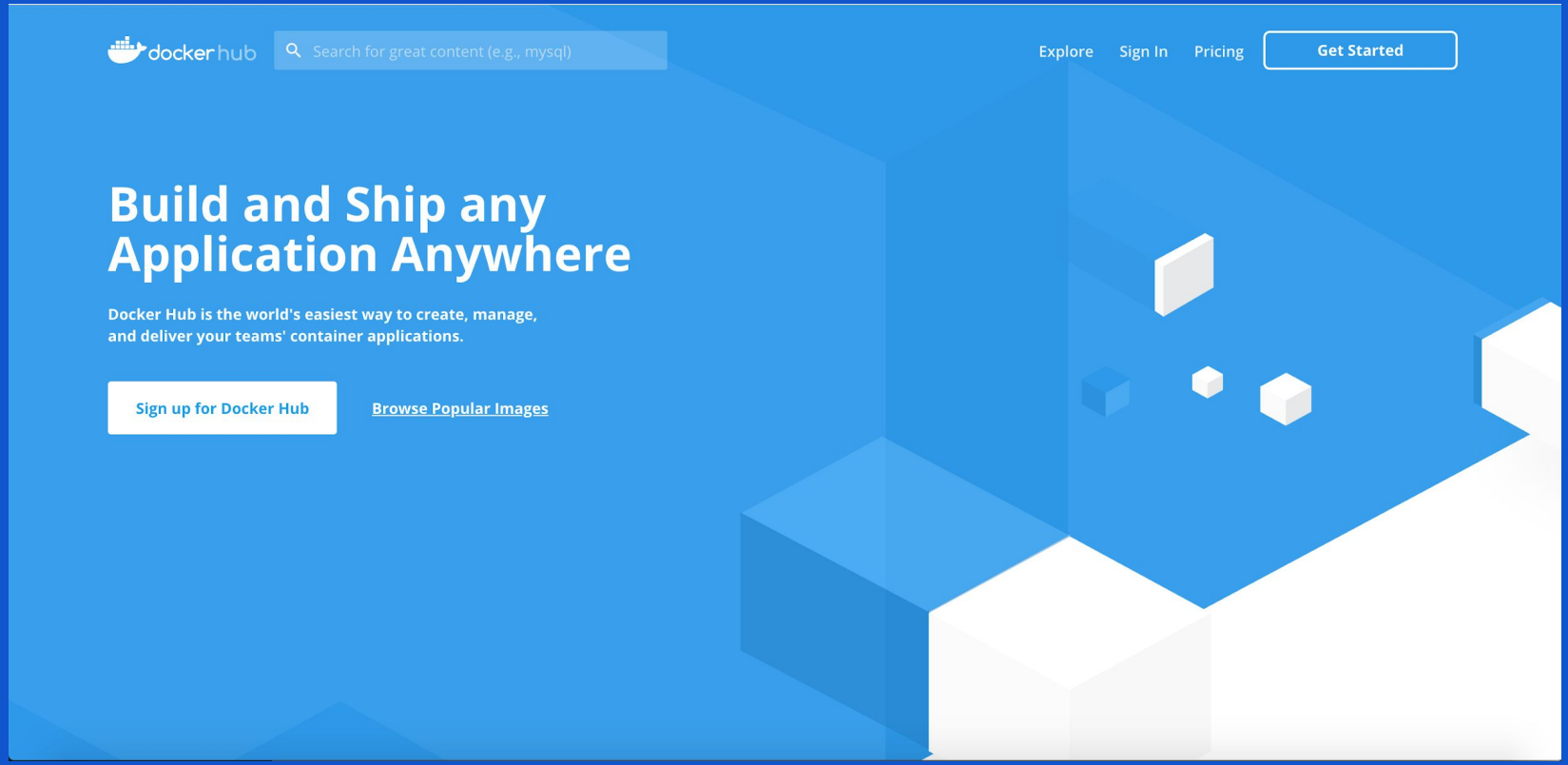
- Contain applications in a way that keep them isolated from the host system that they run on
- Package up an application with all of its required libraries and other dependencies (runtime), and ships it all out as one package
- Containers work in a pretty similar way to the virtual machines, but instead of creating a new OS powered by a virtual hardware in the host OS, the containers pack only the individual components needed for the apps to work, therefore avoiding high resources utilization
- OS-level virtualization
- Greatly suitable for microservices architectures
- Different containers on the same host can deploy microservices built on different technologies and frameworks


VIRTUALIZATION
APP
APP
APP
GUEST OS
GUEST OS
GUEST OS
HYPERVISOR
HOST OPERATING SYSTEM
VS.
CONTAINERS
APP
APP
APP
APP
APP
SUPPORTING FILES
RUNTIME
SUPPORTING FILES
RUNTIME
HOST OPERATING SYSTEM

That being said: Docker is a tool designed to make it easier to create, deploy, and run applications by using containers.



Docker Hub


docker hub
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Let’s play then!

Image: docker pull anhellojz/pokepy:3.0
Code: https://github.com/AnhellO/pokepy

Which other resources can I start looking at?

1. https://docs.docker.com/get-started/
2. https://stackify.com/docker-tutorial/
3. https://docker-curriculum.com/
4. https://labs.play-with-docker.com/
5. https://labs.play-with-docker.com/ & https://training.play-with-docker.com/
6. https://dockerbook.com/

Where to look at after?

Once you feel comfortable with your docker learning...

- Docker Swarm
- Docker Enterprise
- Kubernetes
- RS Container Manager
- AWS
  - Elastic Container Service (ECS)
  - Elastic Kubernetes Service (EKS)
  - Fargate
- Jenkins X