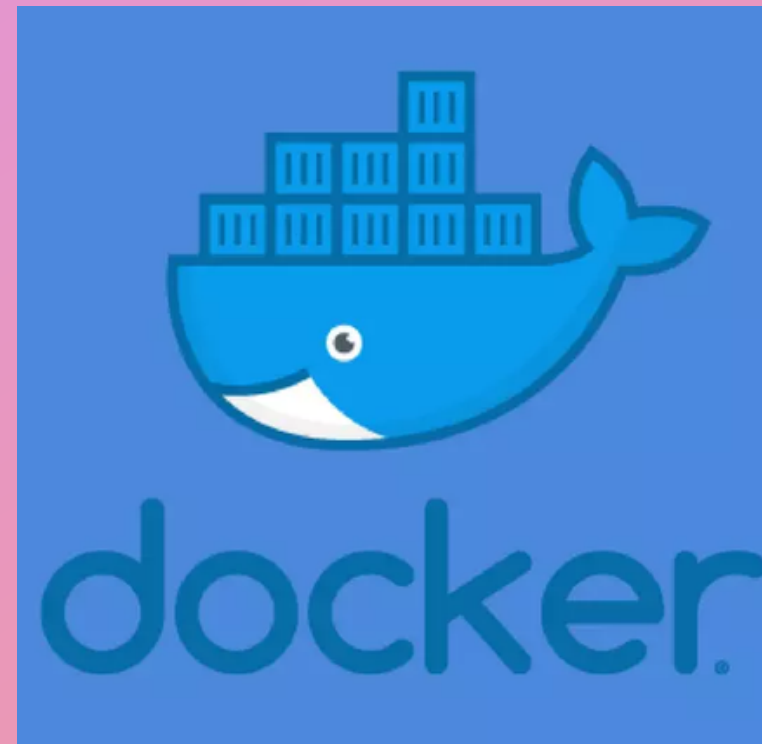


# Introduction to Docker



BY,  
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# What is Docker?

- Docker is a computer program that performs operating system-level virtualization, also known as containerization.

## Container:

- Is a standard unit of software that packages up code and all its dependencies so the applications runs quickly and reliably from one computing environment to another.

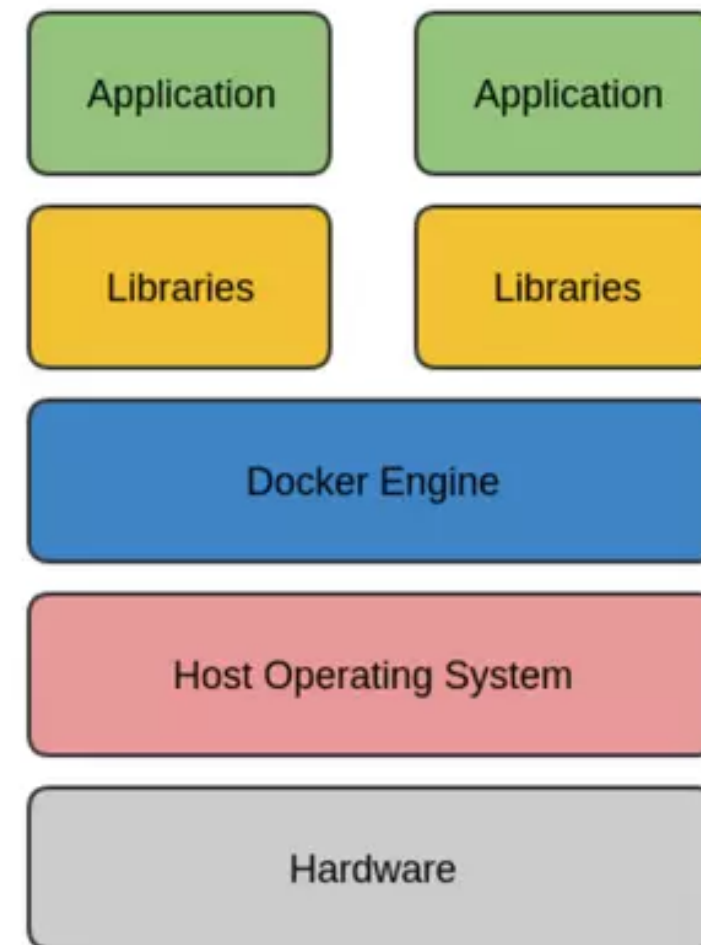
# Docker Architecture

- Docker container is an application with all of its dependencies
- Compared to traditional VM:

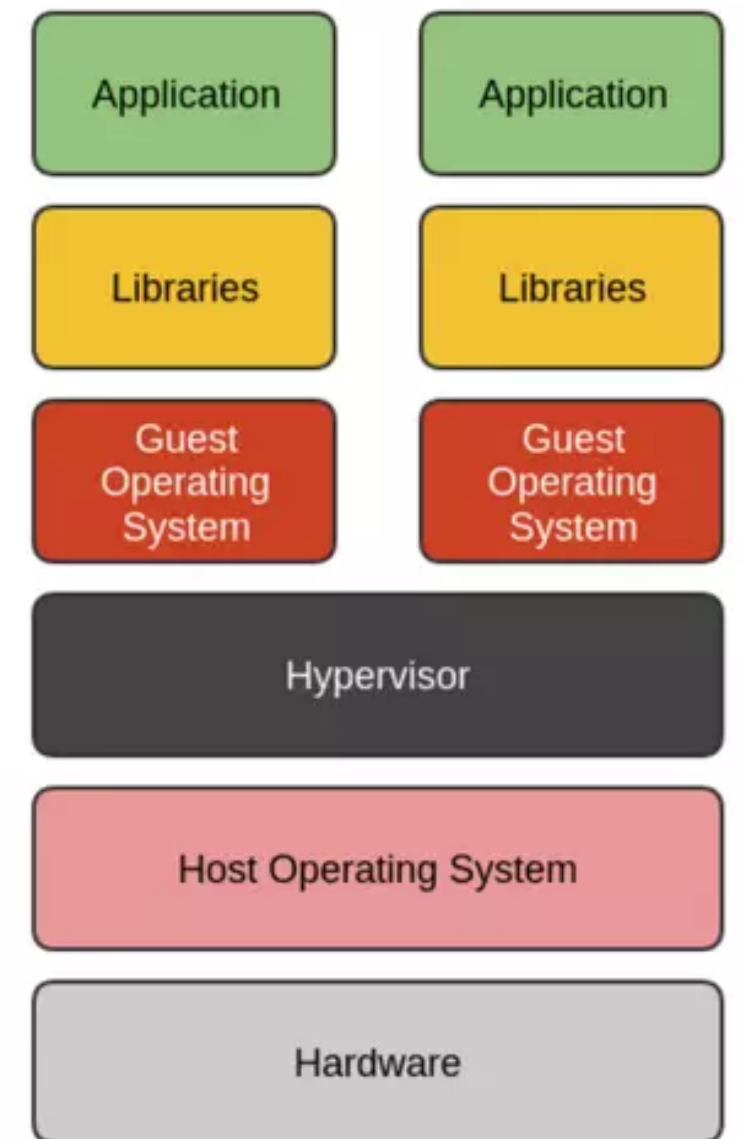
**No Hypervisor**

**No Guest os**

**Containers are isolated**



**Docker**

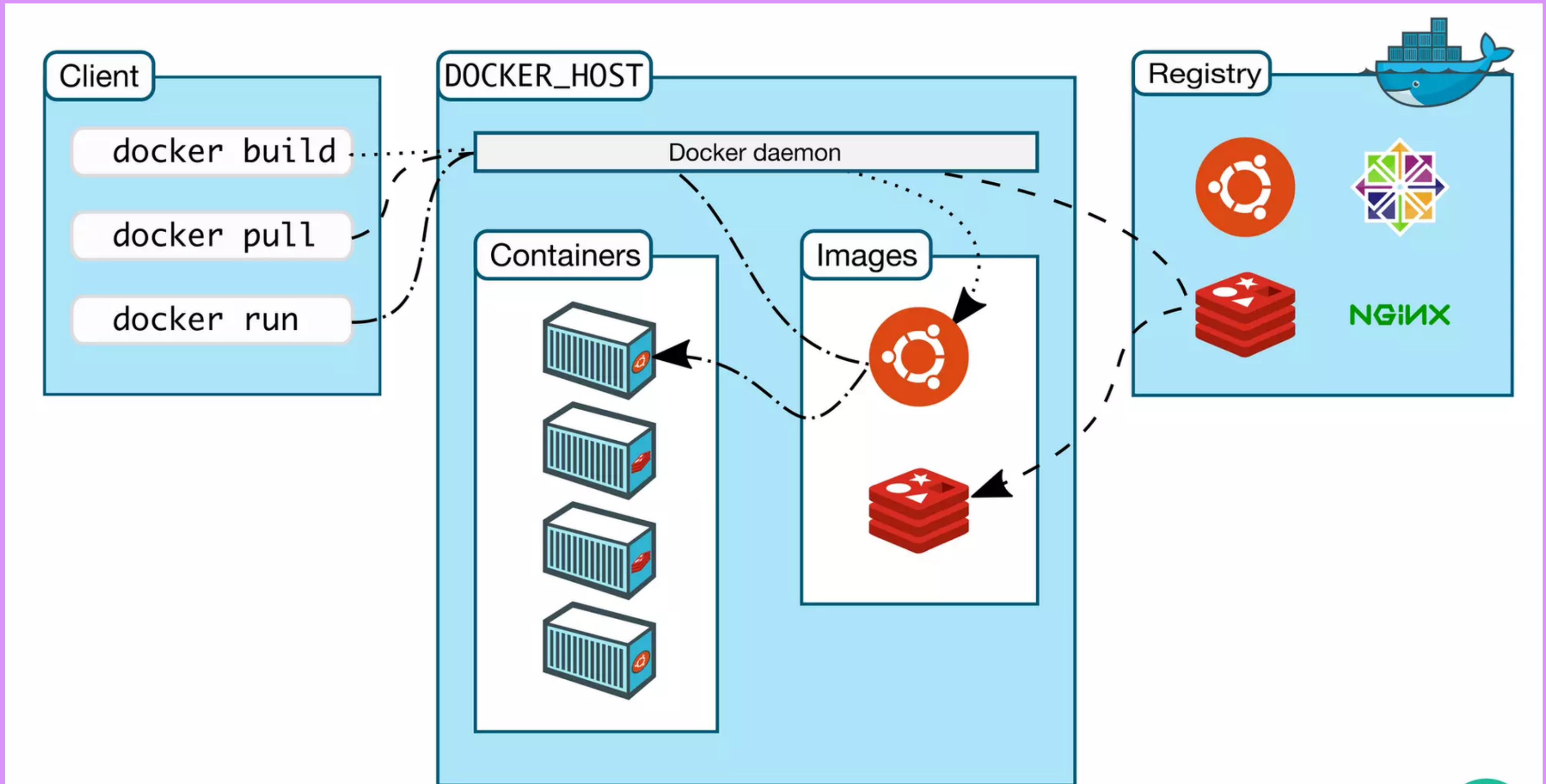


**Traditional Virtual Machine**

# Docker Dictionary

- **Image** - Read only snapshot used to build a container
- **Container** - Runtime environment built using an image
- **Docker File** - Recipe on how to create an image
- **Registry** - Public or Private service for storing images
- **DockerHub** - <https://hub.docker.com/> - official public registry like Github for docker images.

# Docker Ecosystem



# Creating the first docker container

- Pull the ubuntu image from the registry  
`$docker image pull ubuntu`
- Start a container based on the ubuntu image  
`$docker container run-it--name ubuntu ubuntu/bin/sh`

## Listing images and containers

### List images

- `$docker images`
- `$docker image ls`

# List running containers

- `$docker ps`
- `$docker container ls`

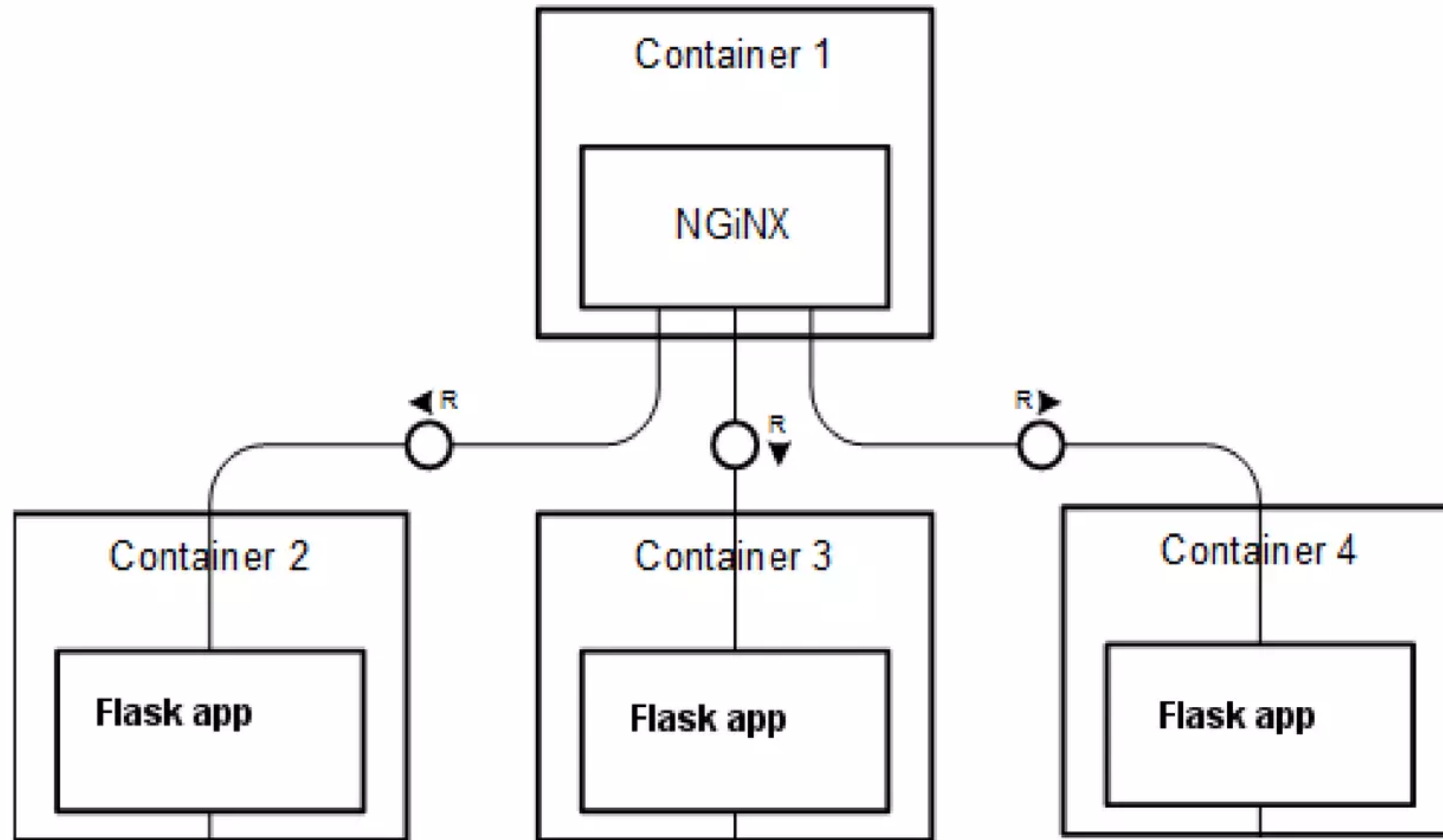
# List all containers

- `$docker ps-a`
- `$docker container ls-a`

# Start in detached mode

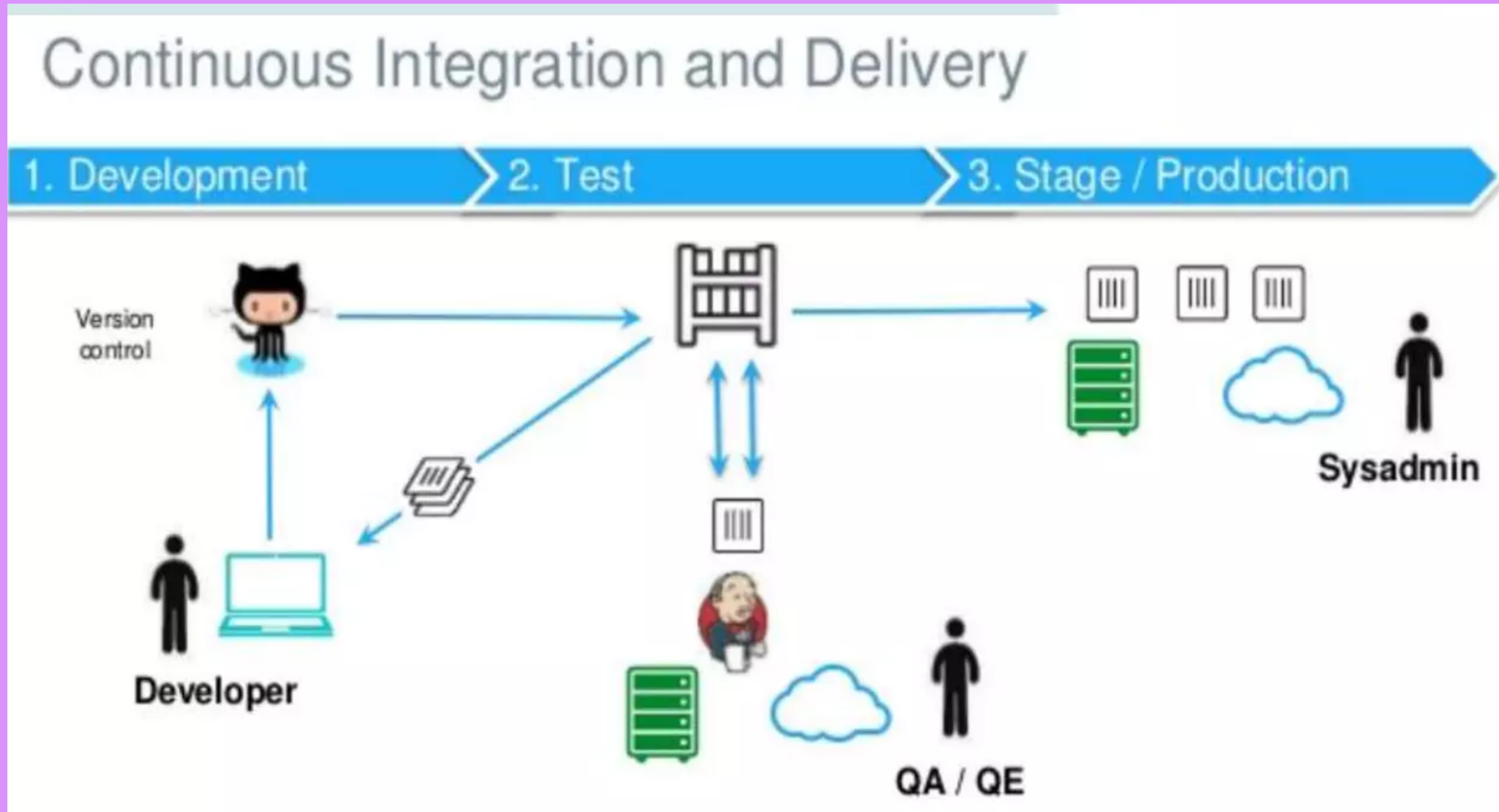
- To connect to terminal to the detached container  
`$docker attach {id} {NAME}`
- To leave container without exiting it  
`CTRL+P+Q`

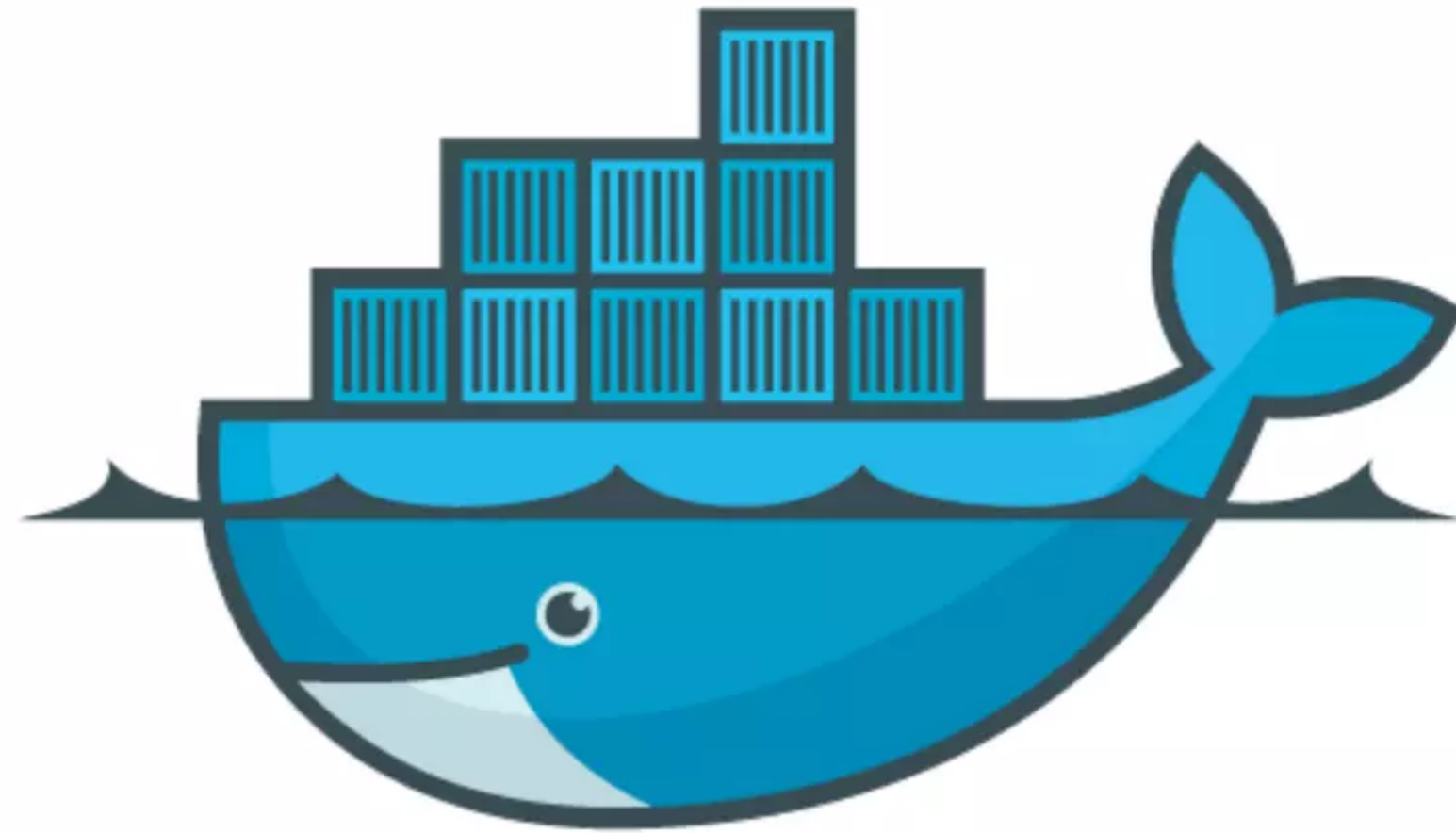
# Docker Compose





# Application Delivery





docker

Thank you!

