Developer Circle: Kampala

Hi! I'm **Luigi Morel**.
Software Engineer

I'll be discussing about:

"How to ship products using Docker."

4:00PM - 4:50 PM
11th November 2021
https://facebook.com/groups/devckla

FACEBOOK

Agenda

Why Docker?

Docker as a platform

Docker Installation

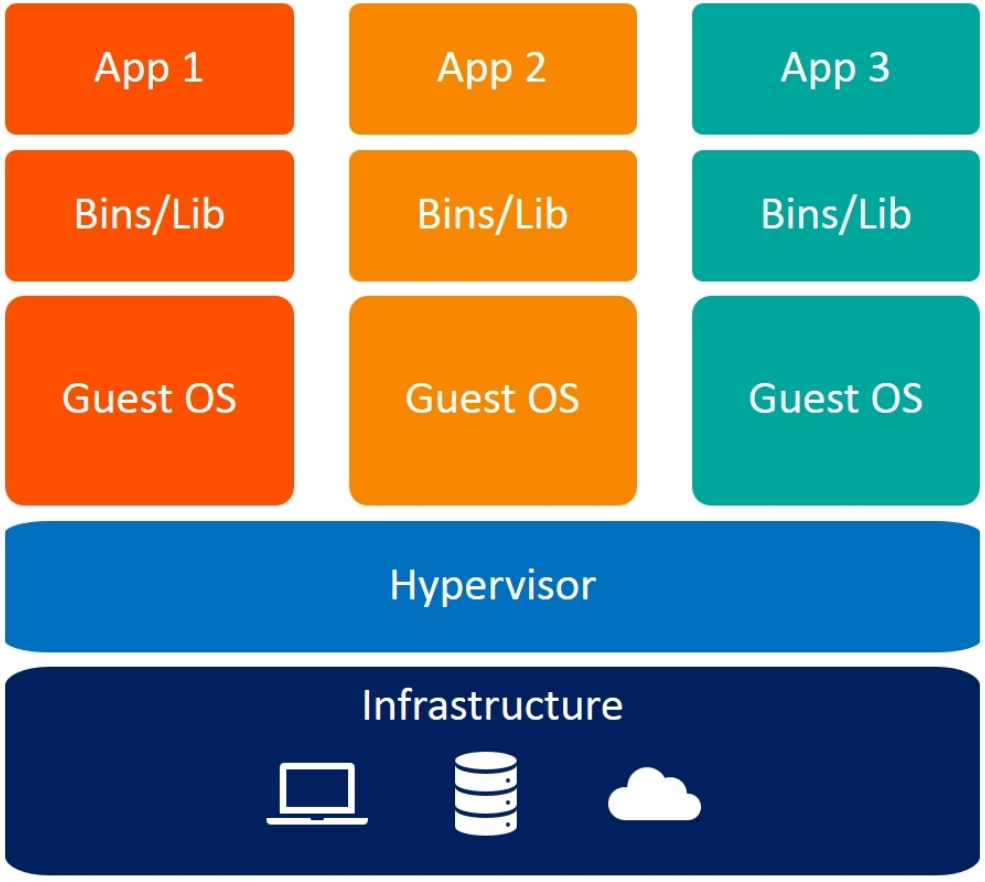
Demo

What is Docker?

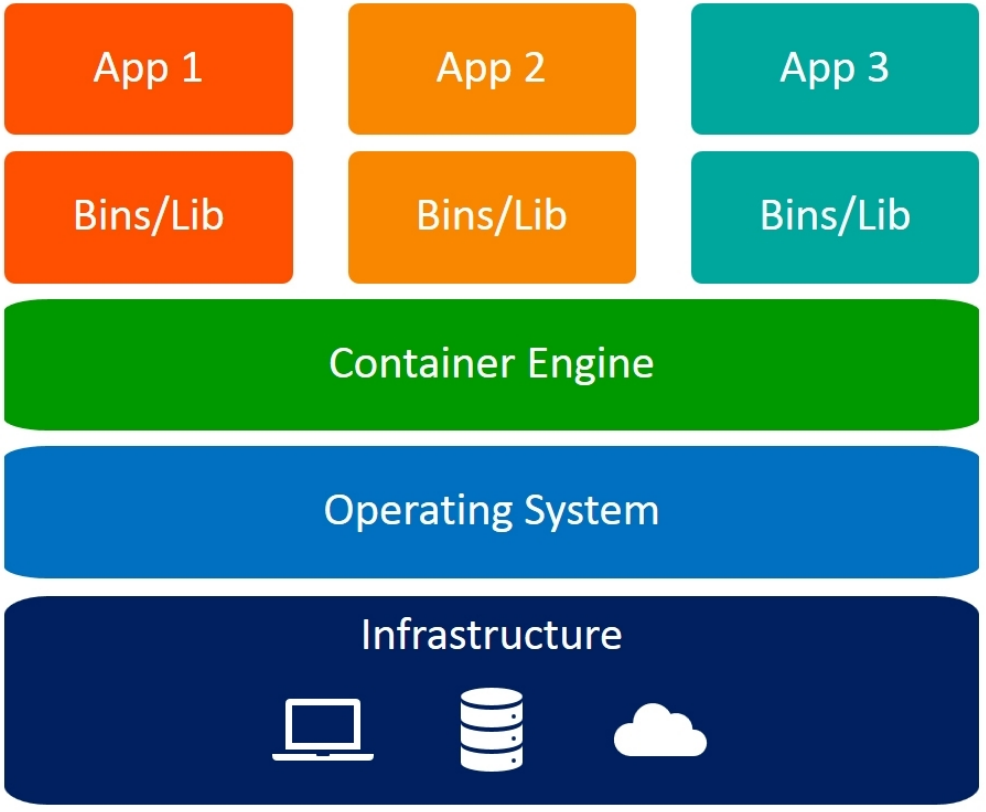
👉 A tool for running application in an isolated environment

👉 The Docker environment is platform independent

👉 A standard for team collaboration.

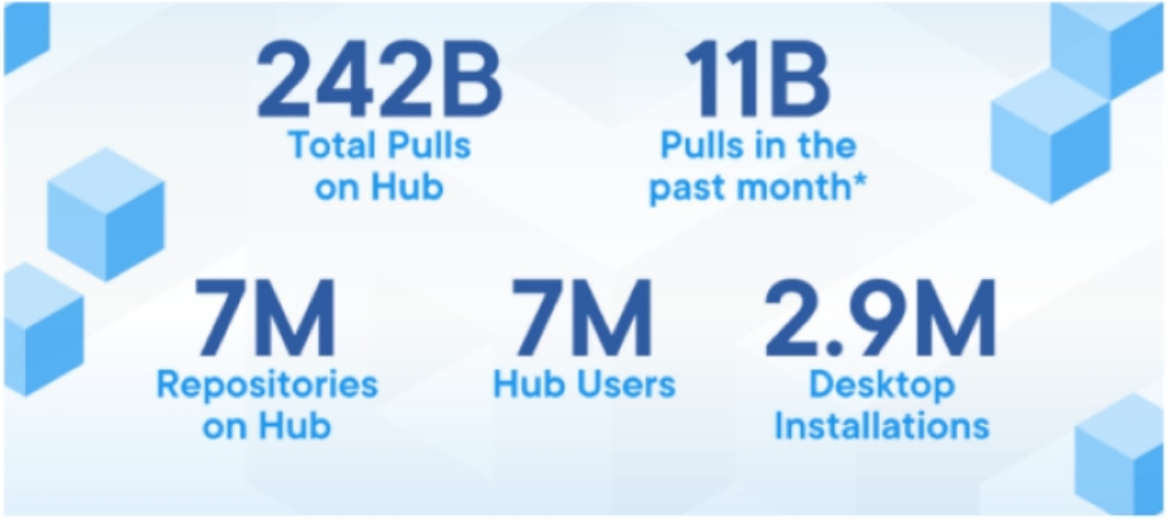


Virtual Machines



Containers

Docker Community



Source: **https://www.docker.com/blog/docker-index-dramatic-growth-in-docker-usage-affirms-the-continued-rising-power-of-developers/**

Why Docker?

- Isolated
- Lightweight
- Cost effectiveness with efficiency.
- Collaboration
- Flexibility
- Time saving

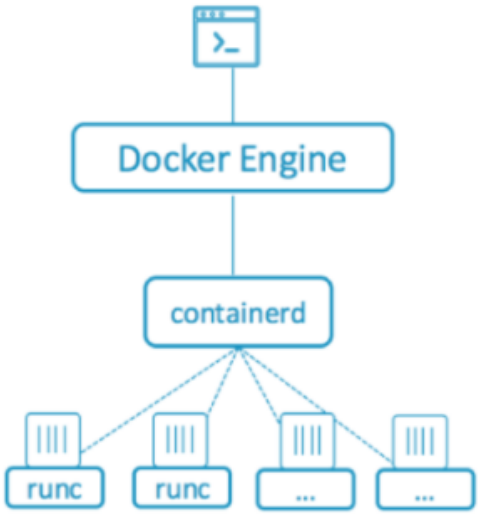
Components of the Docker Platform

Docker Engine

+

Docker Hub + Docker CLI

Docker Engine



Same Docker UI and commands

User interacts with the Docker Engine

Engine communicates with containerd

containerd spins up runc or other OCI compliant runtime to run containers

Source: **https://dev.to/pratik6217/docker-engine-deep-dive-into-docker-4hig**

Docker CLI

- **docker build** # Build an image from a Dockerfile
- **docker run** # Run the image
- **docker images** # List all images on the machine
- **docker ps** # List running and stopped containers
- **docker stop** # Stop a running instance of an image
- **docker rm** # Remove an instance of an image
- **docker rmi** # Remove an images
- **docker -f rm** # Force remove an instance of an image

Docker Hub

- Share images with team
- Storage for images (private or public)
- Webhooks for integration with other services
- Manage access to repositories with code for an image
- User verified images from other official vendors
- Re-use images by other people

Docker Installation

My Case:

Using Windows 10 Build 1379

Docker Installation

Install Docker

Follow these steps to install Docker

1. Download Docker from **https://docs.docker.com/get-docker/**
2. Double-click InstallDocker.msi to run the installer.
3. Follow the Install Wizard: accept the license, authorize the installer, and proceed with the install.
4. Click Finish to launch Docker.

Docker Workflow

- Find a desired image on Docker Hub
- Pull the image from Docker Hub to local machine
- Run the image as a container
- Stop the container
- Remove an instance of the image
- Force remove the container that is currently running
- Remove an image

Demo