Containers

Definition

Containers are considered as a box of ships, which makes it easier to ship a particular code from one machine to another machine.

A container is an isolated, lightweight for running an application on the host operating system.

Question 2 :- Working mechanism of Containers

Containers are built on top of the host operating system's kernel and contain only apps and some lightweight operating system APIs and services that run in user mode.

It is three step process

- It needs some kind of **manifest** that describes the container itself.

   Like **Dockerfile** in Docker World. **YAML manifest** in Cloud Foundry

- **Creating Actual Image.**

   Like Docker Images in Docker World, ACI in Rocket

- **Running Actual Container.**

   Which contains all the runtimes and libraries, binaries needed to run an application

When any instruction is given, runtime

- Daemon builds/pulls the image from Container Registry
- Creates a container from that image which runs the executable that produces output and
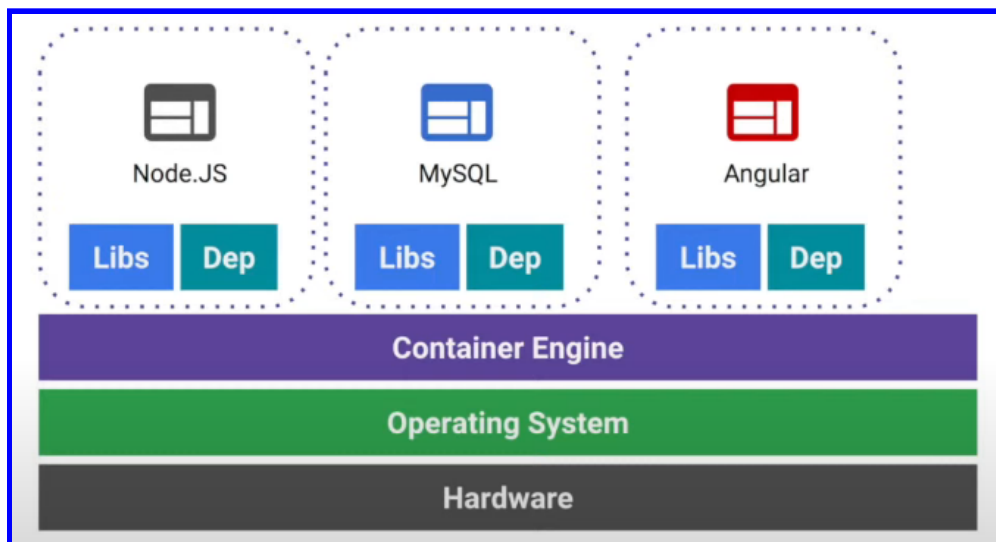- The Daemon again streams that output to the client.

Figure: Architecture of Containerization