



Docker - 01

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intRODUCTION

- Understanding the problem domain
- What are containers
- What is docker
- VM vs Container
- Docker components
- Setup Docker on linux





it DOESN'T WORK

Developer

It works fine for me

Tester

Its a Bug

Ops / Sys Eng

Does't work its failing



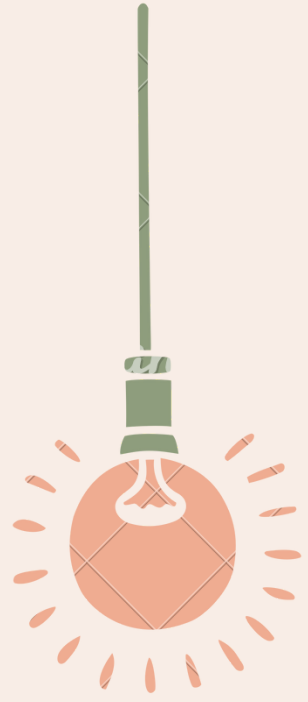
PROBLEM

how to make sure that software runs correctly when it is moved from one computing environment to another.

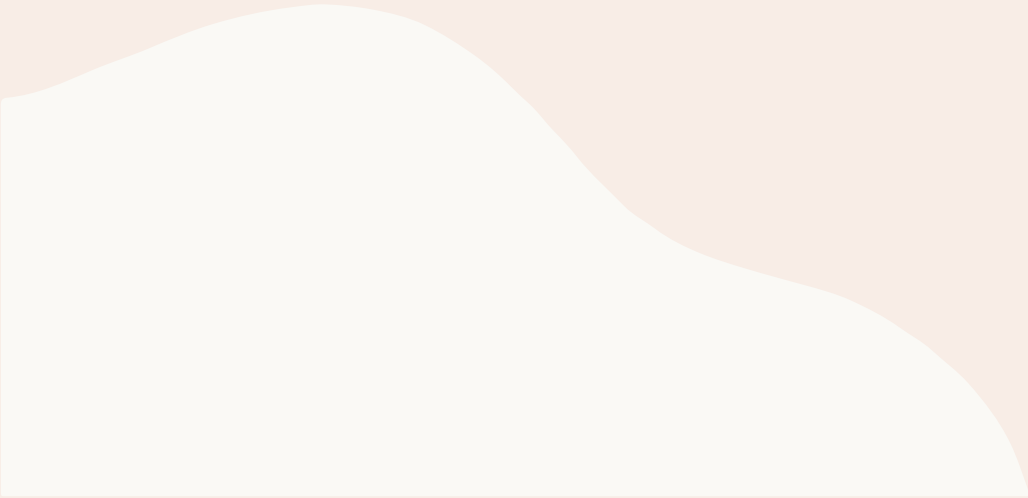
Easily run multiple versions of software with different set of libraries without conflicting between each other

Pre-built images make it easier to adopt and test a new software, there are no installation hassle





CONTAINERS



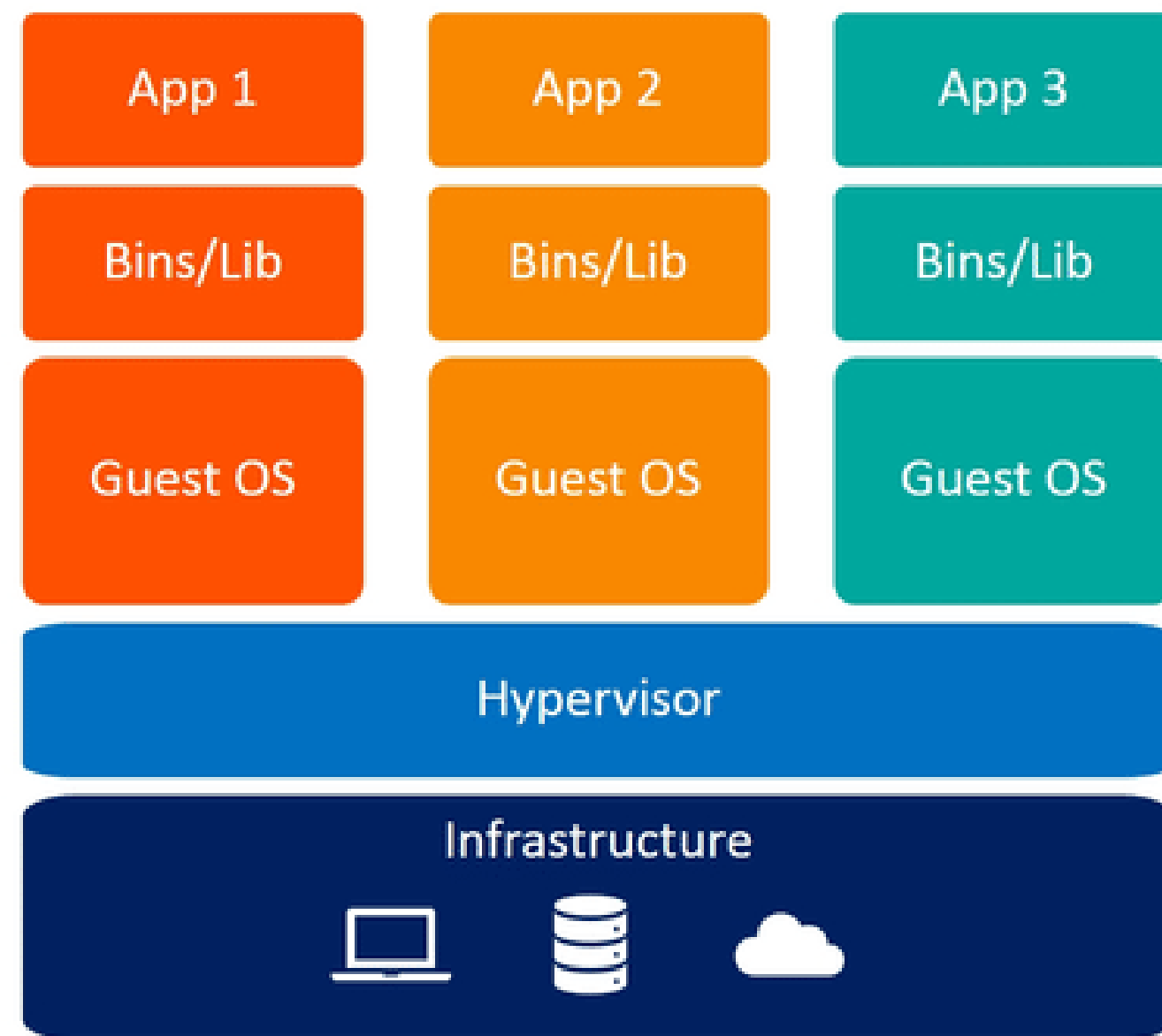


WHAT'S A CONTAINER

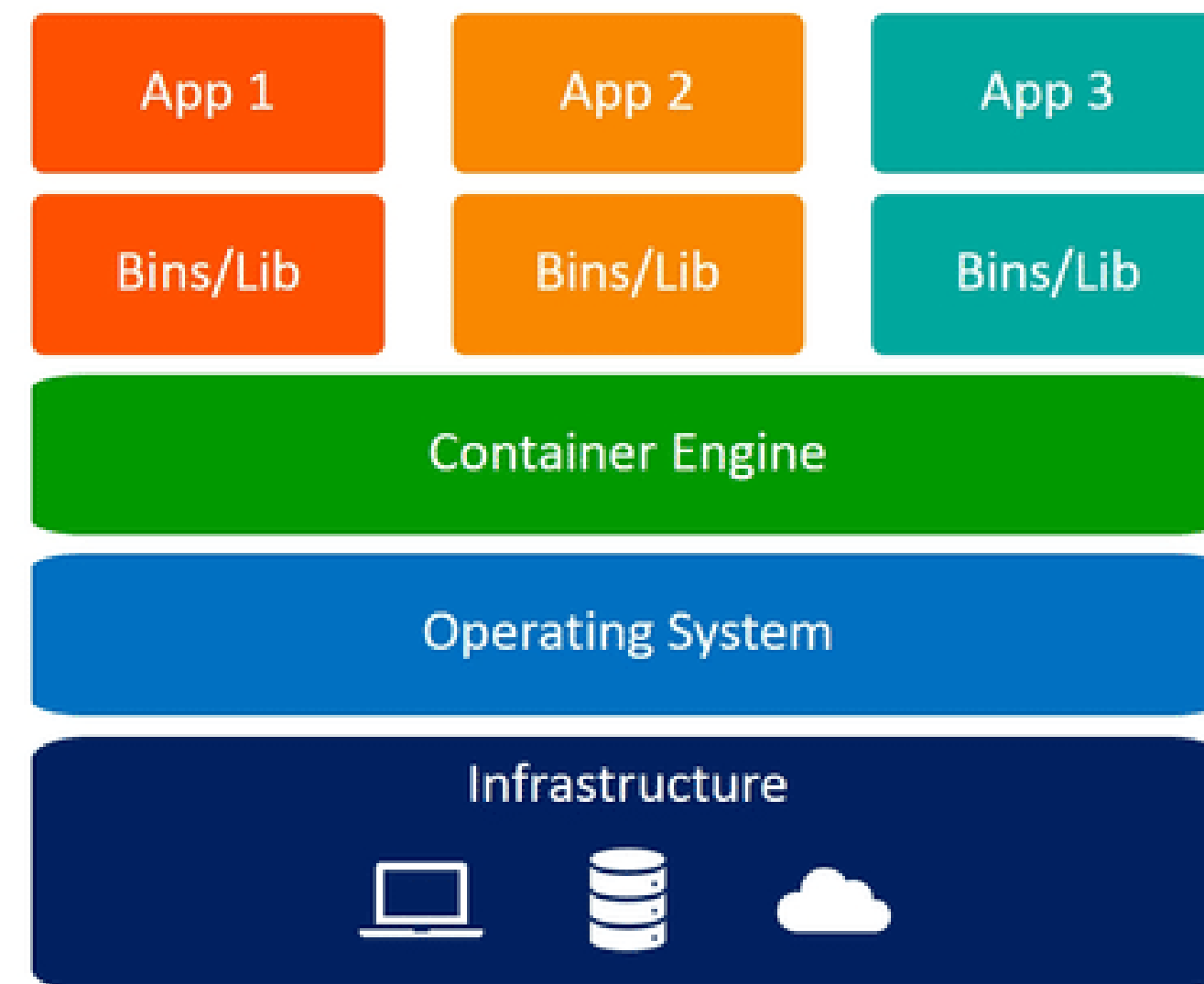
- A container is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another.
- Containers are an abstraction at the app layer that packages code and dependencies.
- Build on top of containerd and runc
- Multiple containers can run on the same machine and share the OS kernel with other containers
- Each running as isolated processes in user space. Containers take up less space than VMs (container images are typically tens of MBs in size), can handle more applications and require fewer VMs and Operating systems.



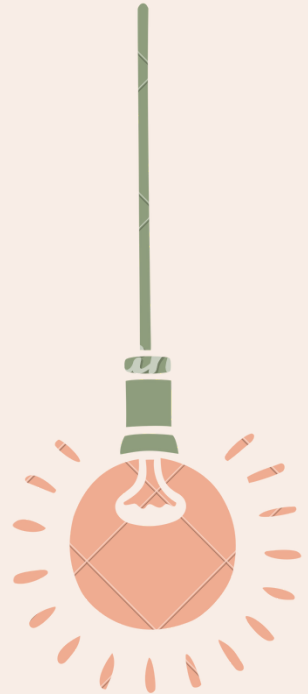
VM VS CONTAINER



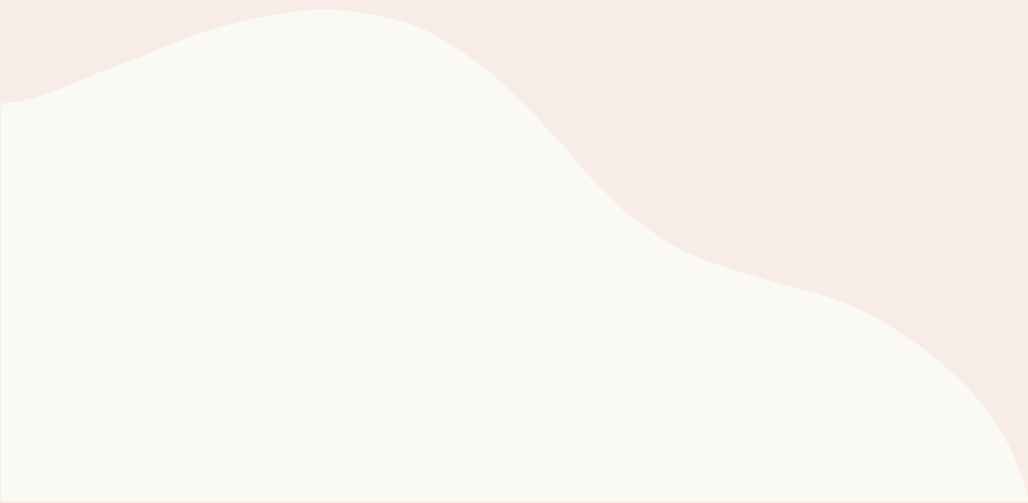
Virtual Machines

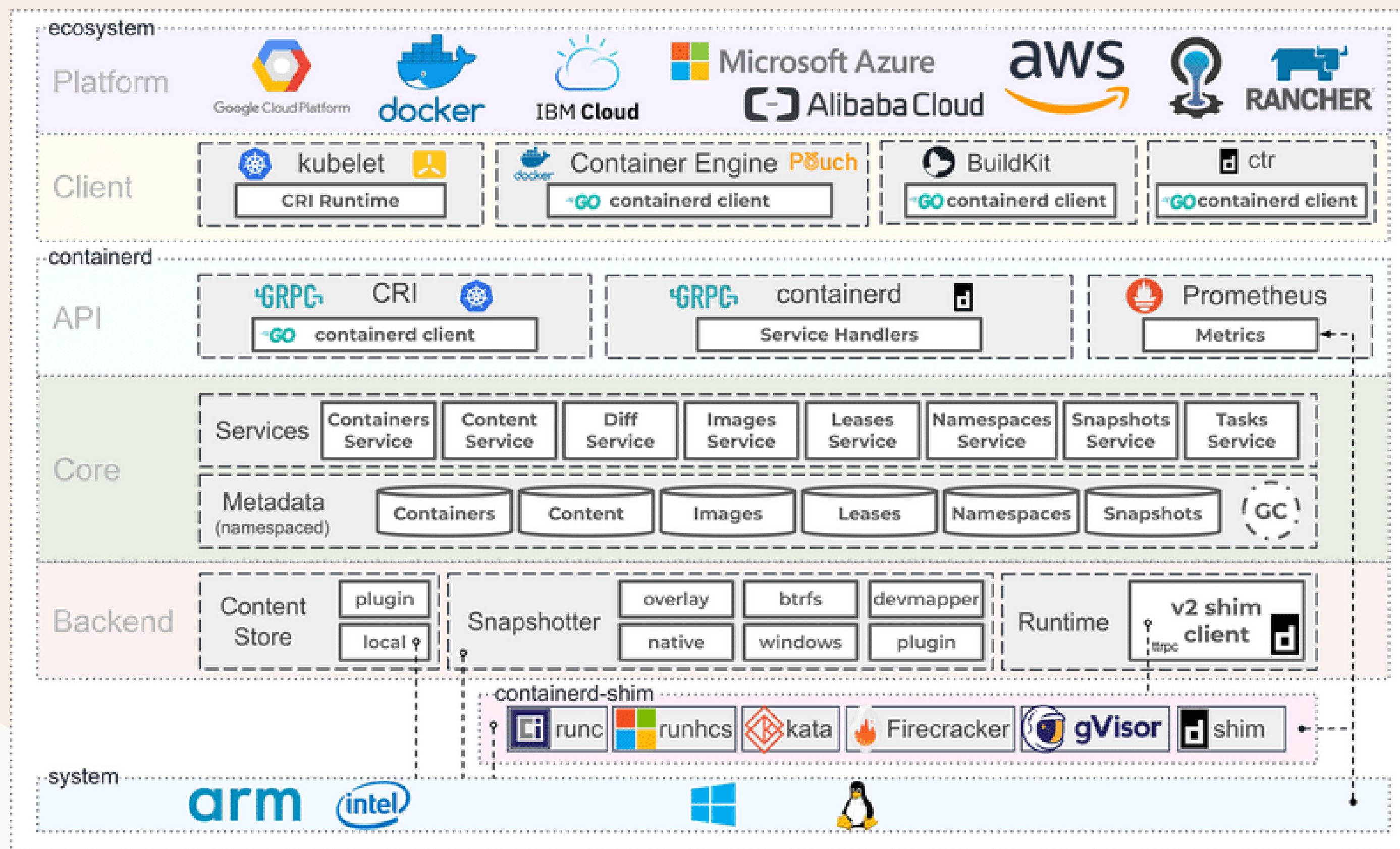


Containers



DOCKER



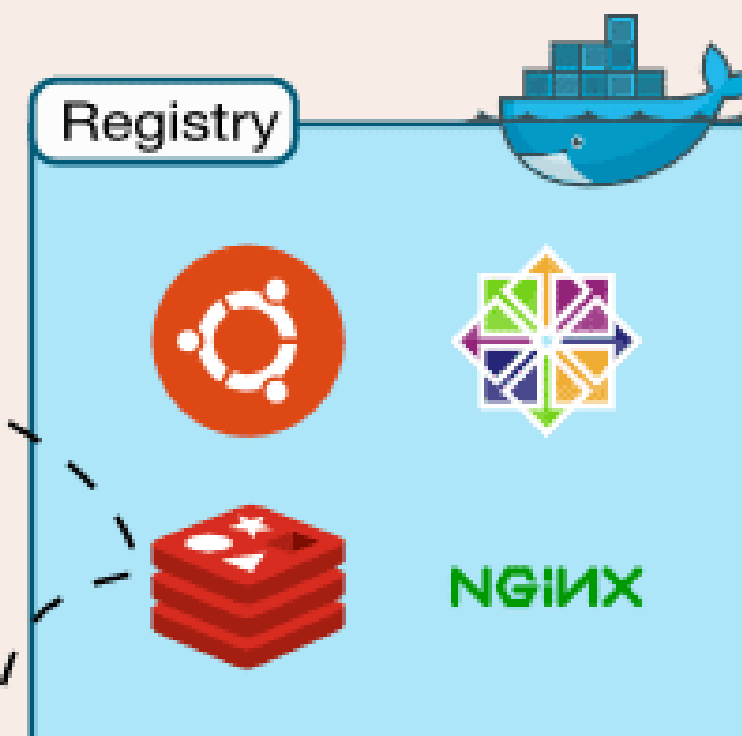
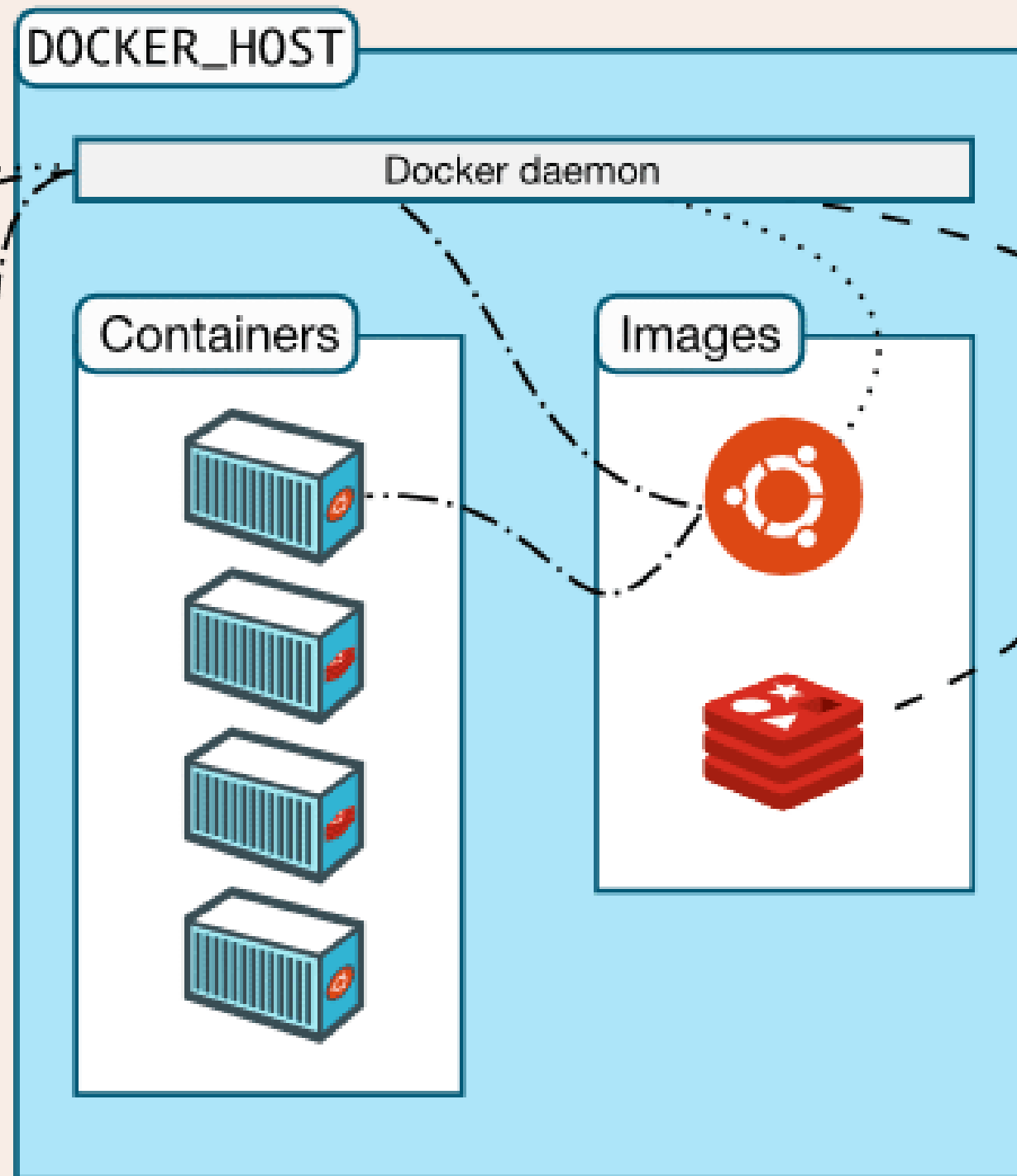
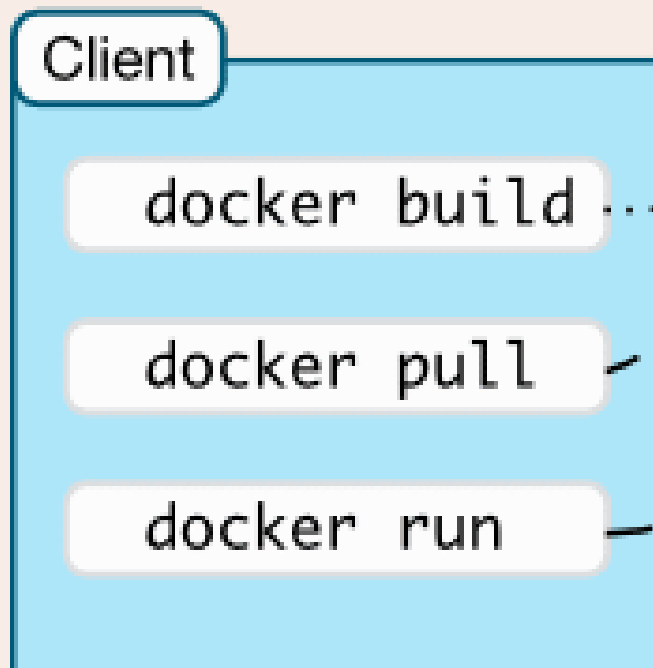
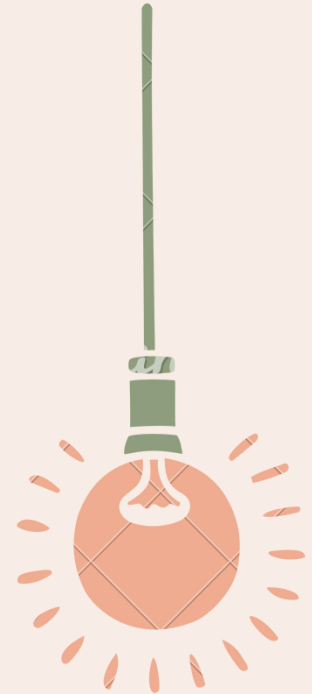


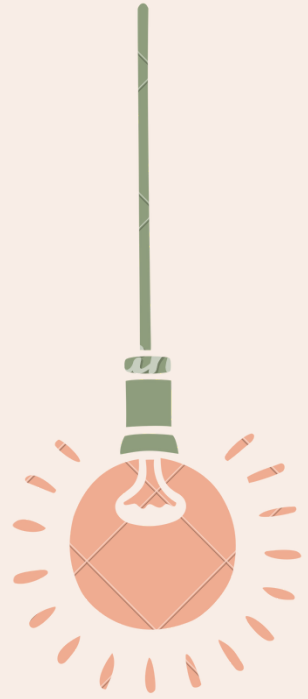


WHAT'S DOCKER

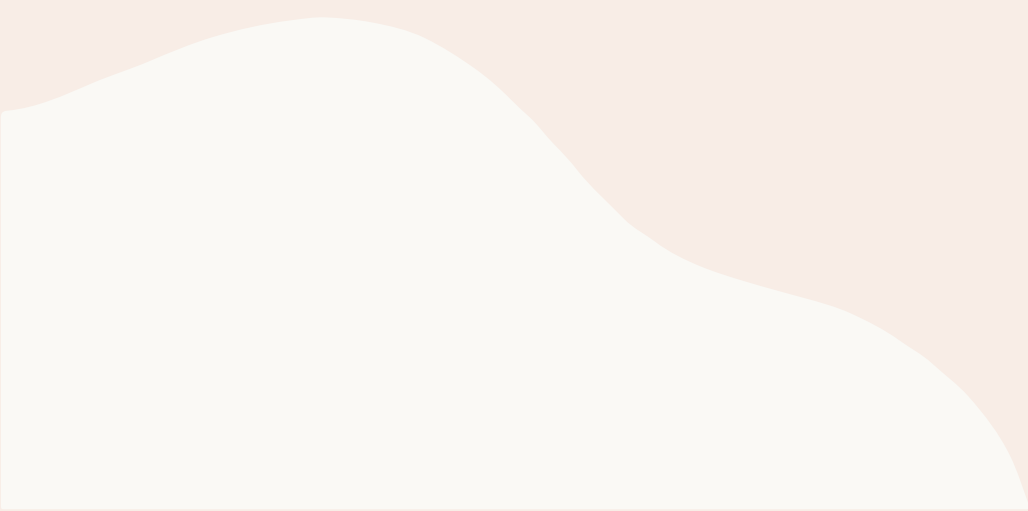
Open-source platform for building and managing containerised applications
Orchestration of a fleet of nodes







SETUP DOCKER





QUESTIONS ?





THANKS

