

Agenda

- **What is a Container**
- **Docker Containers concepts and components**
- **Getting started with Docker**
- **Docker Basic Command Lines**

What are Containers

A Definition - System Isolation

- A *Container* is simply an Operating System-level Virtualisation based on process **isolation** on the host machine.
- The *Isolation* leverages kernel **namespaces** (separate processes name space) and **CGroups** (separate CPU, Memory, I/O, Quotas) system isolation features in Linux operating systems.
- The **kernel** allows the existence of multiple isolated **userspace** instances.
- Unlike *Virtual Machines*, *Containers*:
 - Share the same Host Kernel
 - Has packaging and a distribution methods.