#028 Kubernetes - Pods

Introduction

this is part 28 from the journey it's a long journey(360 day) so go please check previous parts, and if you need to walk in the journey with me please make sure to follow because I may post more than once in 1 Day but surely I will post daily at least one .

And I will cover lot of tools as we move on.

Pods

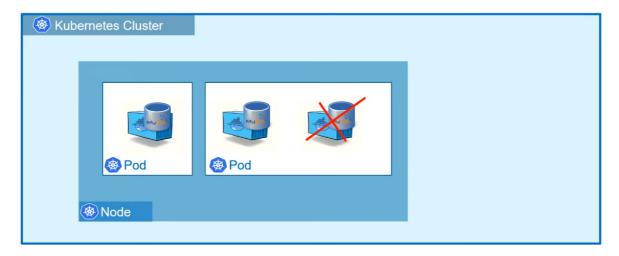


Pod is the smallest component in Kubernetes.

Kubernetes Cluster must have at least 1 master , let's say we have only 1 Node . So this node will be master and worker in same time.

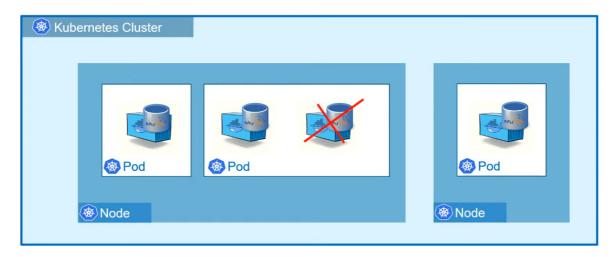
A pod is an encapsulation of container. Why encapsulation? because I don't need my container to run directly, so I can control it using pod.

Load Balancing



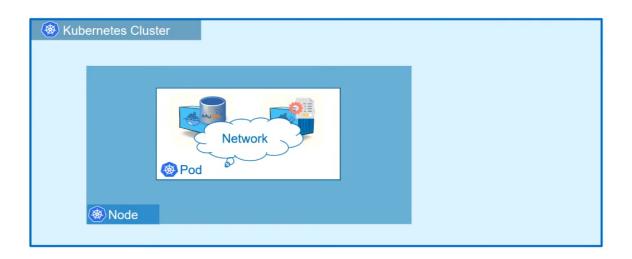
you can't put 2 containers from same type inside one pod , Instead you make another pod.

Why make another one? because if the load balance for 1 container is full or down, another container can serve.



you can also put the Pod inside a new complete Node.

Multi-container Pods



You can put 2 containers from different type example python and SQL in 1 pod, but it's not recommended because if 1 Pod down you will loose both app and DB, So it's risky. It's very rare to use 2 containers in 1 Pod, which is container that heavily depend on container 1, so if container 1 down their is no reason to container 2 be running, Example we have a container process data for web server so if this web server down their is no reason to this container to be running.