Docker is written in Go Language

**Docker Module Name**

Config

Container

Image

Network

Node

Plugin

Secret

Service

Stack

Swarm

System

Volume

**Container:**

Create container

List container

Remove container

Create container in background

Stop container

Start container

Detach container

Inspect container

**Kubernetes**

**Installation in Window:**

Download minikube

Download kubectl

Create folder in any directory, paste both files

Rename minikube file to minikube

Set path of current folder in environment variable

Open command prompt and run command as “minikube”, will find many command

Run “minikube start” command, it will download files and setup “Kubernetes” cluster.

**kubectl**

It is a client for Kubernetes client. When we run any command using kubectl, it will create a json and hit to API SERVER to execute your command.

**Kubectl get pods**

Get all pods on cluster

**Minikube ip**

Find ip of minikube VM

Default username of minikube VM is “docker” and password is “tcuser”.

**Minikube dashboard**

Access dashboard

Make sure that **SWAP** in all the nodes in kubernetes cluster are off.

To check **SWAP** status, run command as below:

**Free –h**

To check whether SWAP memory is enable or not.

**Swapoff –a**

Disable all the SWAP memory in kubernetes cluster. Once system will restart, SWAP memory will become enable. To disable is permanently, comment all the lines which starts with SWAP in **/etc/fstab** file. These action should be taken on all the nodes.

Kubernetes is an orchestrator platform.

Kubernetes run docker in backend. Kubernetes supports docker runtime as well as containerd, rocket and many more.

It may happen that Kubernetes will not support latest version of Docker, before you install Docker in Kubernetes, always refer Kubernetes docs.

Smallest resource in Kubernetes is **POD**.

POD can contains Containers, Volumes.

Network always assign to POD, not container.





