A pod is a collection of containers and its storage inside a node of a Kubernetes cluster. It is possible to create a pod with multiple containers inside it. For example, keeping a database container and data container in the same pod.

Types of Pod

There are two types of Pods −

* Single container pod
* Multi container pod

Single Container Pod

They can be simply created with the kubctl run command, where you have a defined image on the Docker registry which we will pull while creating a pod.

$ kubectl run <name of pod> --image=<name of the image from registry>

**Example** − We will create a pod with a tomcat image which is available on the Docker hub.

$ kubectl run tomcat --image = tomcat:8.0

This can also be done by creating the **yaml** file and then running the **kubectl create** command.

apiVersion: v1

kind: Pod

metadata:

name: Tomcat

spec:

containers:

- name: Tomcat

image: tomcat: 8.0

ports:

containerPort: 7500

imagePullPolicy: Always

Once the above **yaml** file is created, we will save the file with the name of **tomcat.yml** and run the create command to run the document.

$ kubectl create –f tomcat.yml

It will create a pod with the name of tomcat. We can use the describe command along with **kubectl** to describe the pod.

Multi Container Pod

Multi container pods are created using **yaml mail** with the definition of the containers.

apiVersion: v1

kind: Pod

metadata:

name: Tomcat

spec:

containers:

- name: Tomcat

image: tomcat: 8.0

ports:

containerPort: 7500

imagePullPolicy: Always

-name: Database

Image: mongoDB

Ports:

containerPort: 7501

imagePullPolicy: Always

In the above code, we have created one pod with two containers inside it, one for tomcat and the other for MongoDB.