Kubernetes

* Open source container orchestration tool
* Helps you manage containerized applications in different deployment environments

Orchestraton tools offer

* High availability or no downtime
* Scalability or high performance
* Disaster recovery – backup and restore

Kubernetes Architecture

In Kubernetes, there will be many clusters. In each cluster there will be a master node and 3 or four worker nodes connected to it. All the nodes will be having kublet which is responsible for the processes of the nodes.

The processes are

* Api Server: It is also the container. It is entrypoint of the cluster. It contains UI,API,CLI
* CotrollerManager: Keeps track of whats happening in the cluster
* Scheduler: Ensures Pods placement
* Etcd : It is key value storage. It is used for the storing the current state of cluster. It is used for backup restore also with help of etcd snapshots

The master nodes and worker nodes with each other with the help of Virtual Network