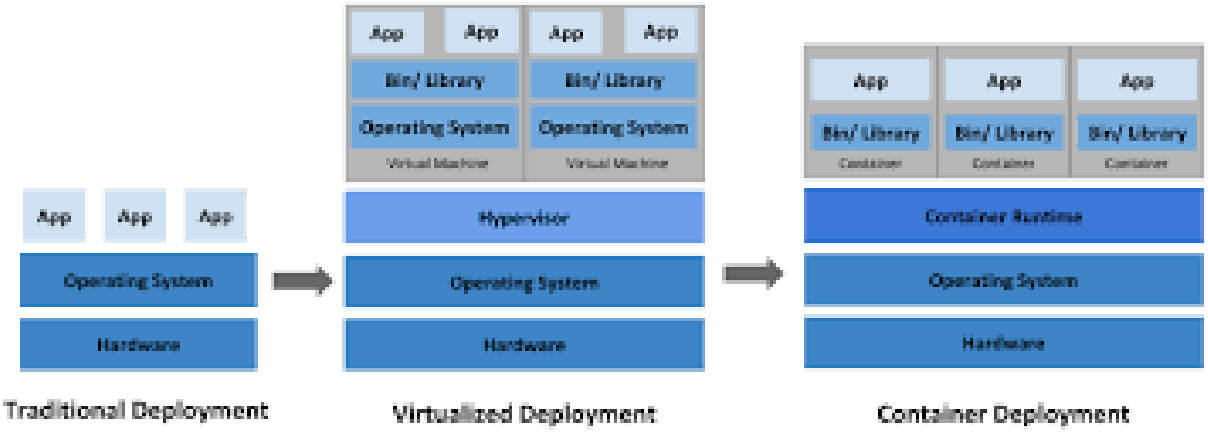
Kubernates:-

Kubernetes is a portable, extensible, open-source platform for managing containerized workloads and services, that facilitates both declarative configuration and automation.

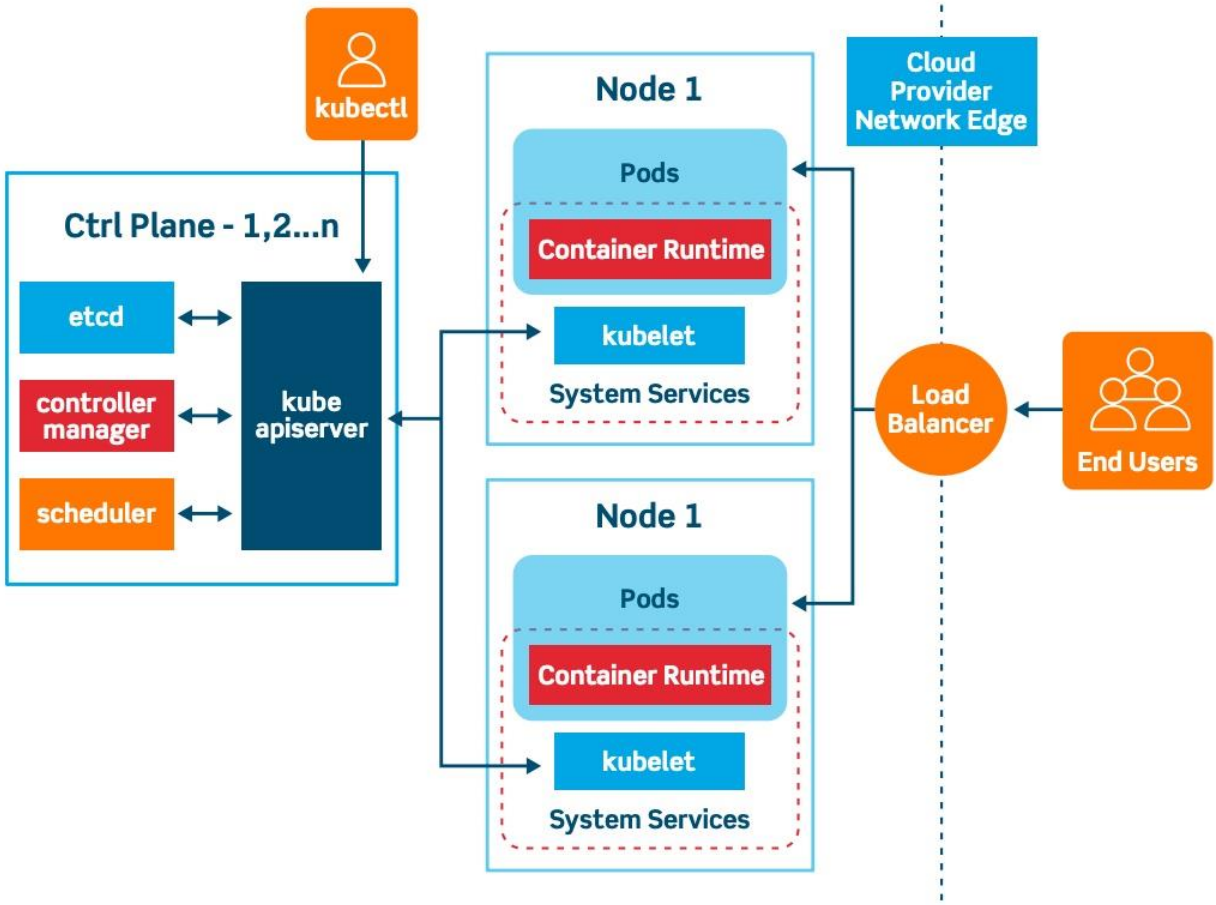


Kubernates provides:-

- Service discovery and load balancing
- Storage orchestration
- Automated rollouts and rollbacks
- Automatic bin packing
- Self-healing
- Secret and configuration management

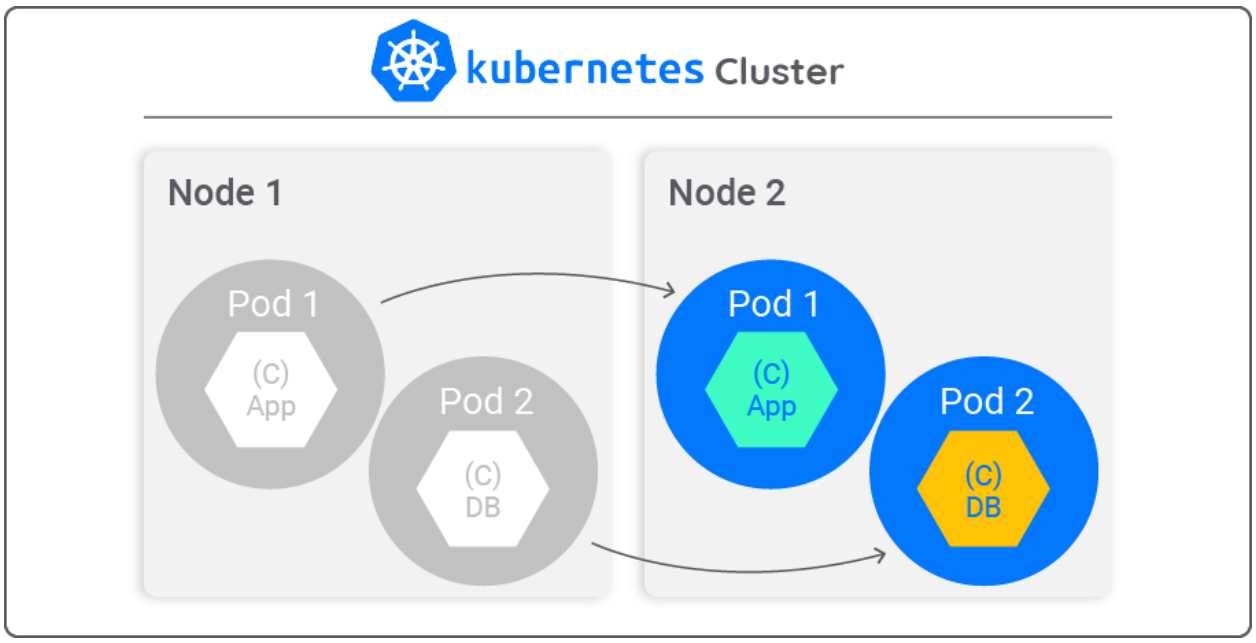
[Kubernetes Service catalog entry](#).

Kubernates Architecture:-



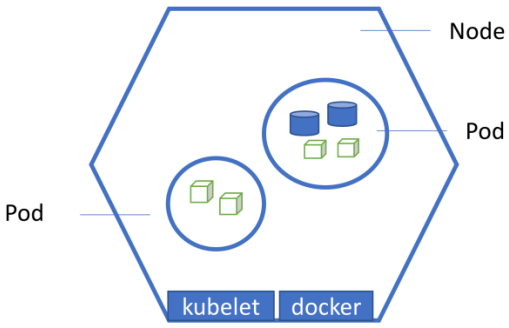
What is Kubernetes Pods?

- When you created a Deployment in Module , Kubernetes created a **Pod** to host your application instance.
- A Pod is a Kubernetes abstraction that represents a group of one or more application containers (such as Docker), and some shared resources for those containers.



- Pods are the atomic unit on the Kubernetes platform. When we create a Deployment on Kubernetes, that Deployment creates Pods with containers inside them.
- Each Pod is tied to the Node where it is scheduled, and remains there until termination (according to restart policy) or deletion.

Nodes



- A Pod always runs on a **Node**. A Node is a worker machine in Kubernetes and may be either a virtual or a physical machine, depending on the cluster.