



Kubernetes components

pod:

1. smallest unit of K8s
2. Abstraction over container
3. Usually 1 application per pod

4. Each pod gets its own ip address
5. New ip address on each re-creation

Service:

1. permanent ip address
2. lifecycle of pod & service not connected.
3. Service is also a load balancer.
App should be accessible through browser so need to External service.

For Database, create Internal service.

Ingress:

First request goes to Ingress then that forwards the request to the service.

Config map & Secret

External configuration of the application like DB-URL goes to ConfigMap.

Secret contains things like credentials
in base64 format

Use it as environment variables.

Volumes

- K8S doesn't manage data persistence.
- physical storage attached to K8S cluster
- can be local / remote storage (external Harddrive)

Deployment -

- (1) blueprint for pods
- (2) we create deployments instead of pods
- (3) Replication

Stateful set

- (1) for stateful apps like DB's

Layers of Abstraction

- Deployment manages a ...
- ReplicaSet manages a ...
- Pod is an abstraction of ...
- Container