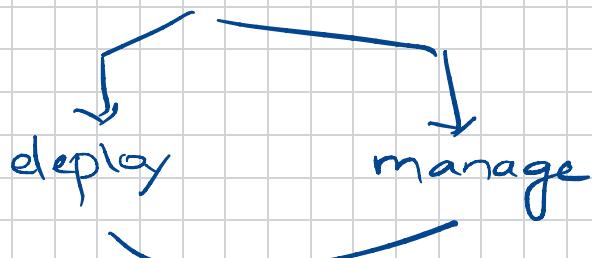


KUBERNETES

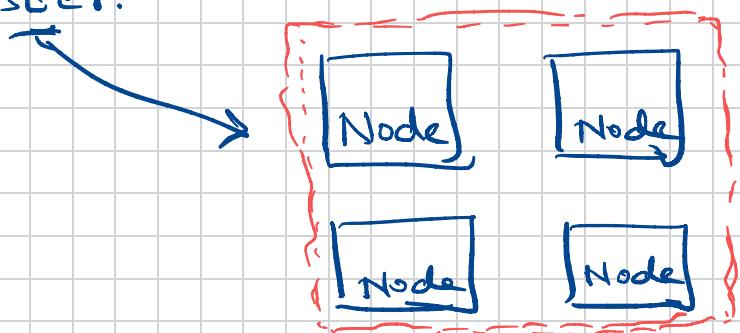
K8S

A container orchestration technology

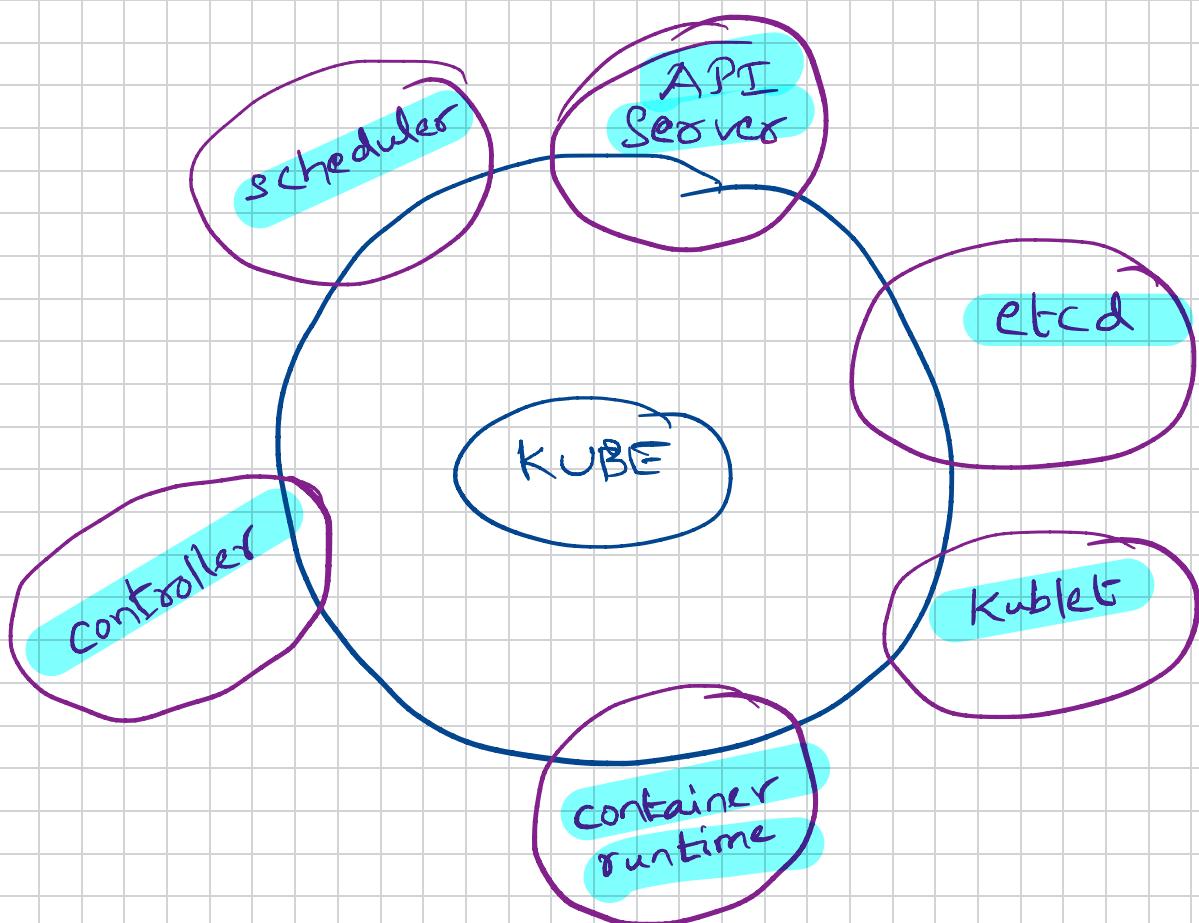


Thousands of containers in a cluster.

Command line interface
kubectl



Kubernetes Components



\$ kubectl get nodes

\$ kubectl get nodes -o wide → node wide
OS details etc

Different ways to install Kubernetes in local system

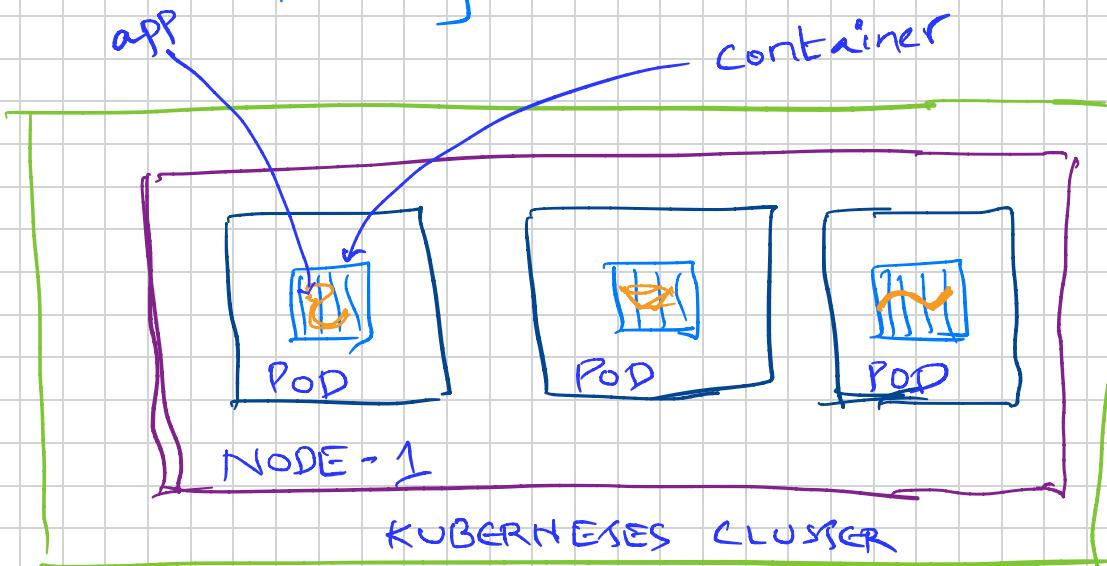
- docker desktop
- minikube
- kubeadm

PODS

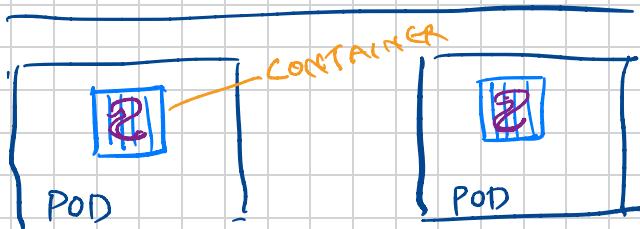
smallest and basic unit in k8s

pod → container

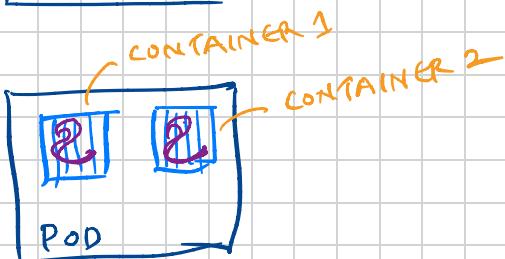
one-one relationship with your containers
running the application



To scale your application

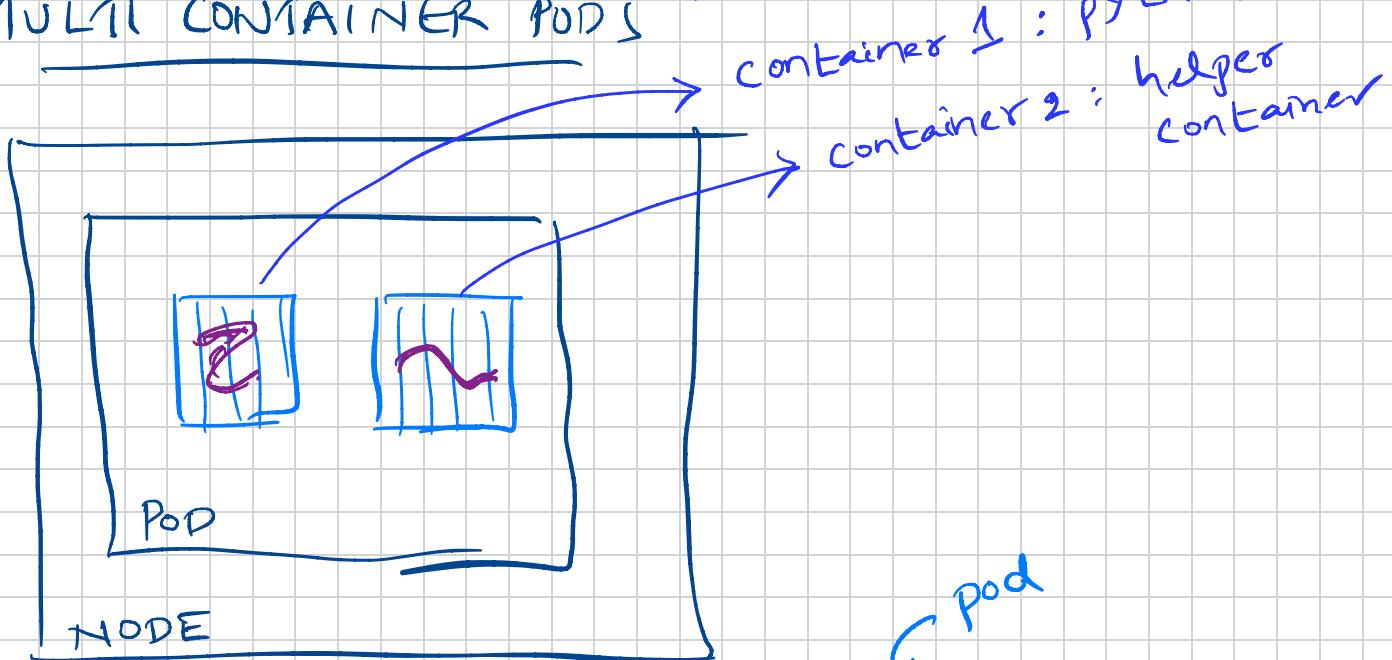


← Add another pod



← Add another container within a pod

MULTI CONTAINER PODS



\$ kubectl run nginx --image=nginx

\$ kubectl get pods

\$ kubectl describe pod nginx

\$ kubectl get pods -o wide

get info of the node where pod is running

YAML

XML
JSON
YAML

} all used to represent data

KEY-VALUE PAIR

space mandatory

Fruit: Apple

Animal: Lion

Liquid: Water

Vegetable: Carrot

ARRAY / LISTS

Fruits:

- Orange
- Apple
- Melon

Vegetables:

- Carrot
- Tomato
- Brinjal

DICTIONARY / MAP

space Banana: space



Calories: 105
 Fat: 0.4g
 Carbs: 27g

Grapes:

Fat: 0.3g
 Carbs: 16g
 Calories: 62

YAML - Advanced

Fruits:

- Banana:

Calories: 105
 Fat: 0.4g
 Carbs: 27g

- Grape:

Calories: 62
 Fat: 0.3g
 Carbs: 16g

Banana:

Calories: 105
Fat: 0.4g
Carbs: 27g

=

Banana:

Calories: 105
Carbs: 27g
Fat: 0.4g

Fruits:

- Apple
- Orange
- Melon

≠

Fruits:

- Apple
- Melon
- Orange

Dictionary — Unordered

List — ordered