



Creating a k8s cluster

Locally (Make sure you have docker)

1. minikube
2. kind – <https://kind.sigs.k8s.io/docs/user/quick-start/>

On cloud

1. GKE
2. AWS K8s
3. vultr

Using kind

- Install kind – <https://kind.sigs.k8s.io/docs/user/quick-start/#installation>

Single node setup

- Create a 1 node cluster

```
kind create cluster --name local
```



- Check the docker containers you have running

```
docker ps
```



- You will notice a single container running (control-pane)
- Delete the cluster



Multi node setup



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kind: Cluster

apiVersion: kind.x-k8s.io/v1alpha4

nodes:

- role: control-plane
- role: worker
- role: worker



- Create the node setup

```
kind create cluster --config clusters.yml --name local
```



- Check docker containers

```
docker ps
```



CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
a3e949b85e91	kindest/node:v1.30.0	"/usr/local/bin/entr..."	2 minutes ago	Up 2 minutes	127.0.0.1:50949->6443/tcp	local-control-plane
49f7f1f3cd1d	kindest/node:v1.30.0	"/usr/local/bin/entr..."	2 minutes ago	Up 2 minutes		local-worker2
ee0b793c157a	kindest/node:v1.30.0	"/usr/local/bin/entr..."	2 minutes ago	Up 2 minutes		local-worker

Now you have a node cluster running locally

Using minikube

- Install minikube - <https://minikube.sigs.k8s.io/docs/start/?arch=%2Fmacos%2F%2Fstable%2Fbinary+download>
- Start a k8s cluster locally

```
minikube start
```



- Run `docker ps` to see the single node setup



A single node setup works but is not ideal. You don't want your
as a worker.



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