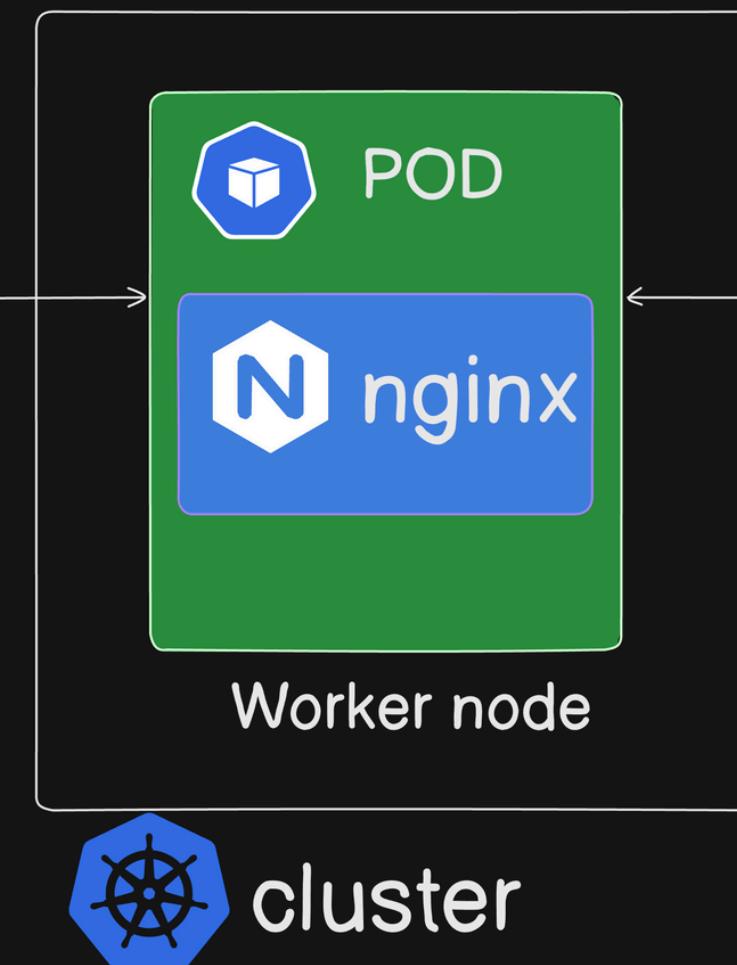


# What is a Pod? smallest deployable unit

Imperative

kubectl run nginx



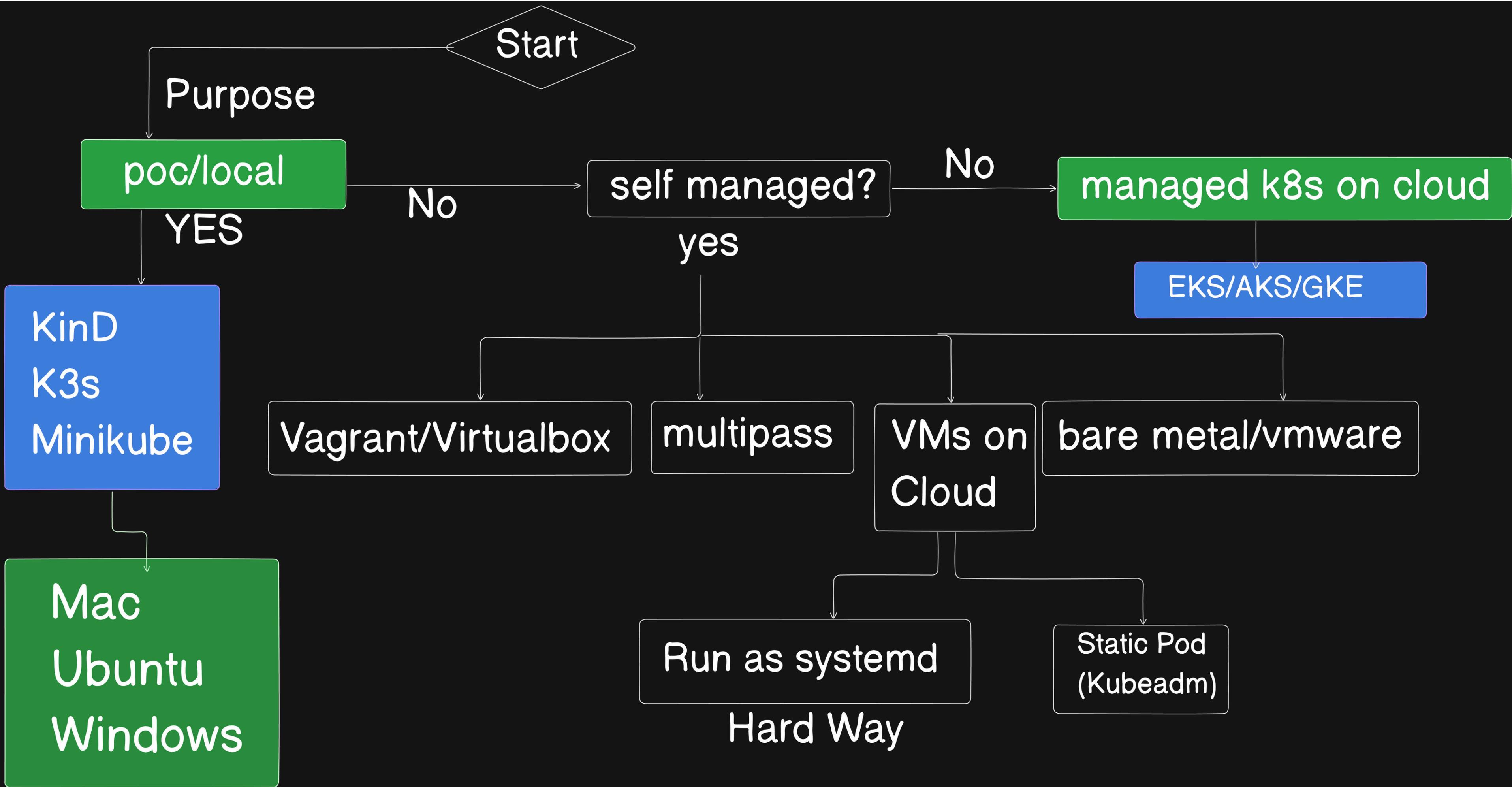
Declarative

JSON

YAML

kubectl create -f file.yaml

```
apiVersion: v1
kind: Pod
metadata:
  name: nginx-pod
  labels:
    env: demo
    type: frontend
spec:
  containers:
  - name: nginx-container
    image: nginx
    ports:
    - containerPort: 80
```



# Administrative tasks

what?

how?

who?

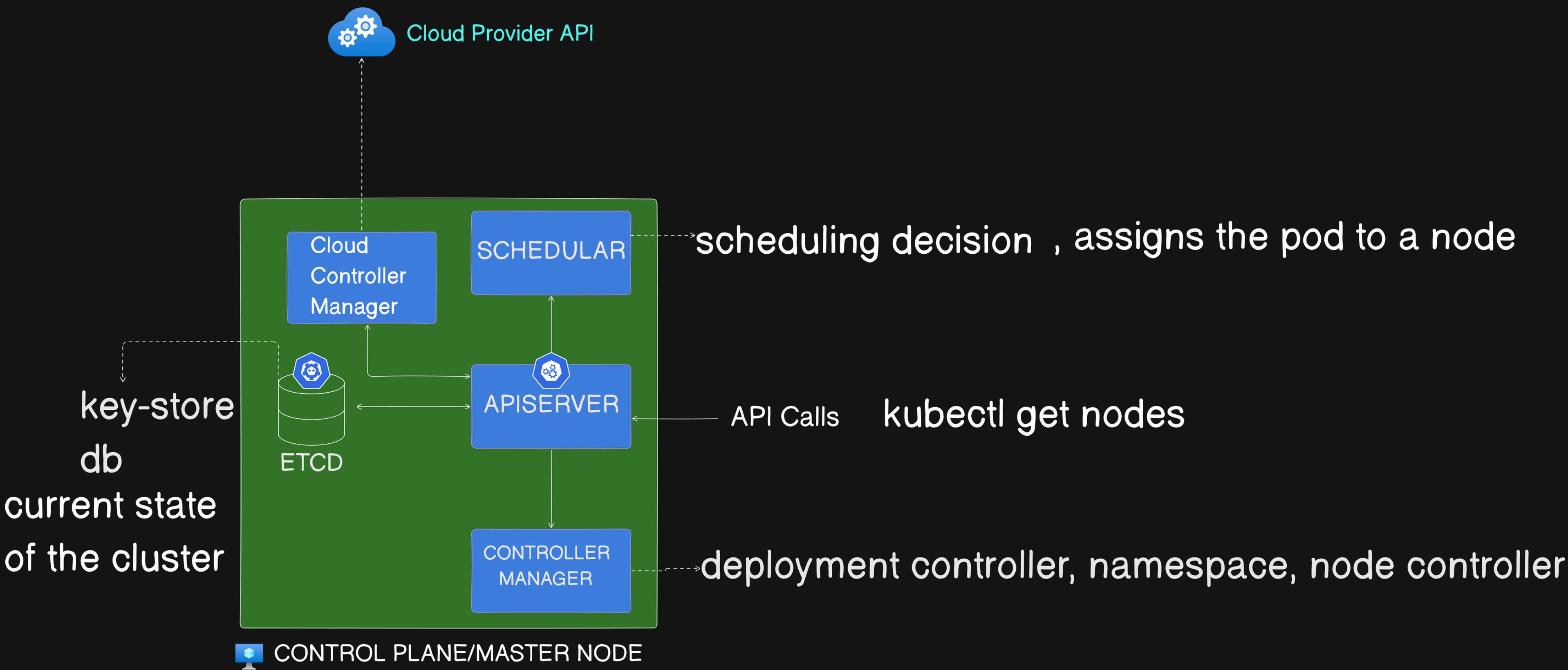
actual task  
fe

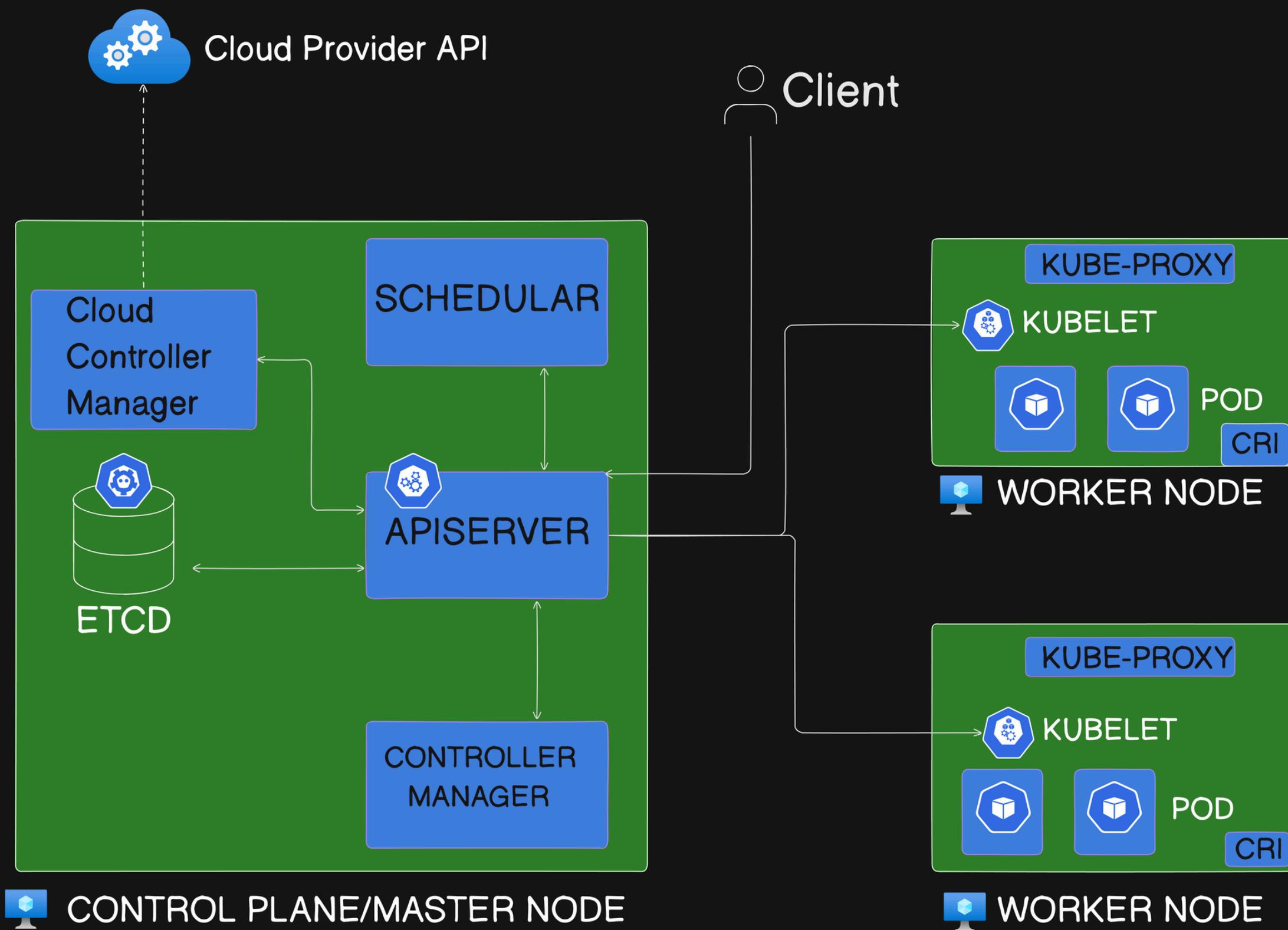
 WORKER NODE

be  
db  
actual task

 WORKER NODE

 CONTROL PLANE/MASTER NODE



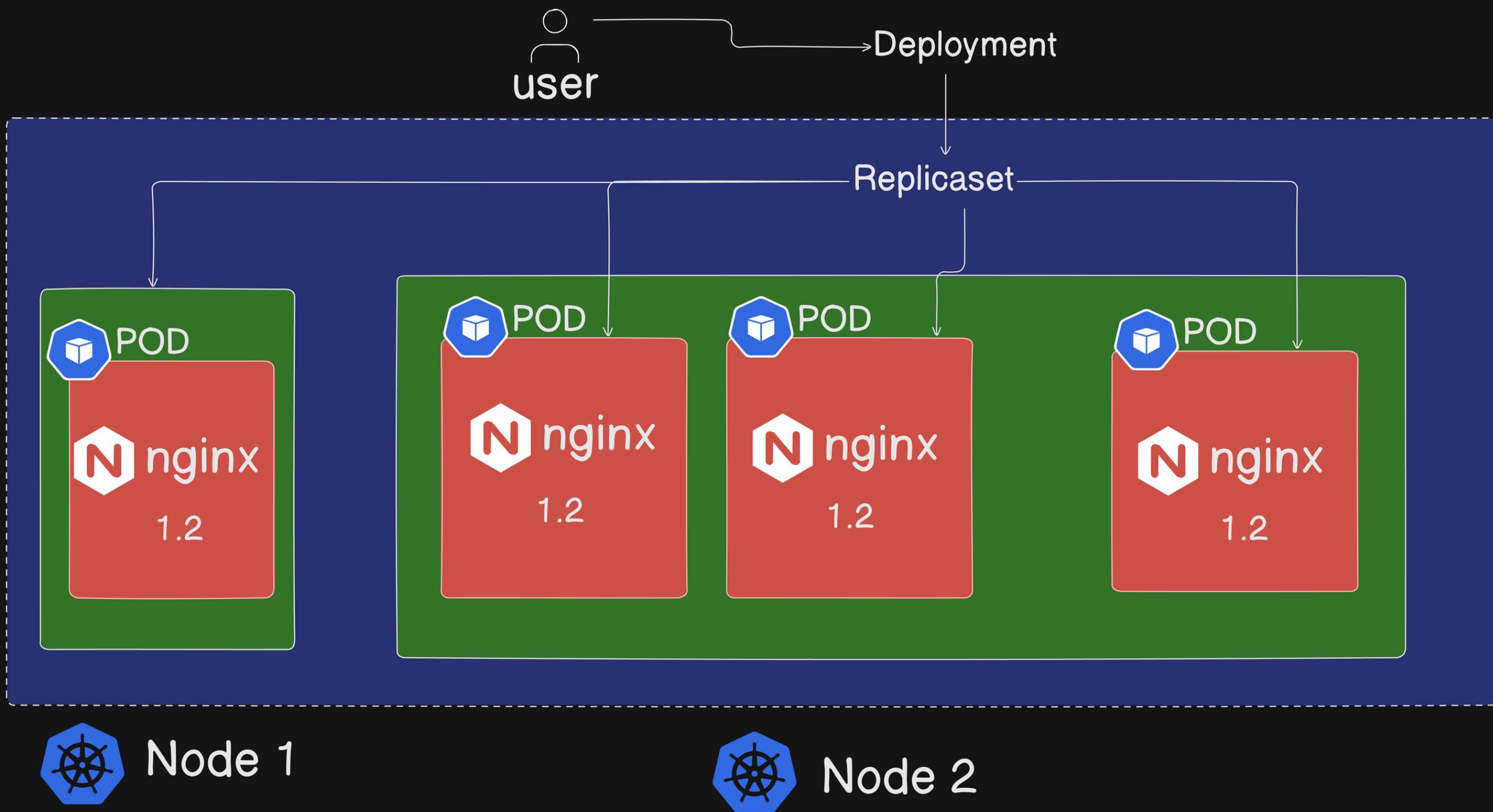


kubelet - node agent  
that runs on every node  
ensures pods are healthy

cri - container runtime interface  
docker-crio  
containerd - 1.24+

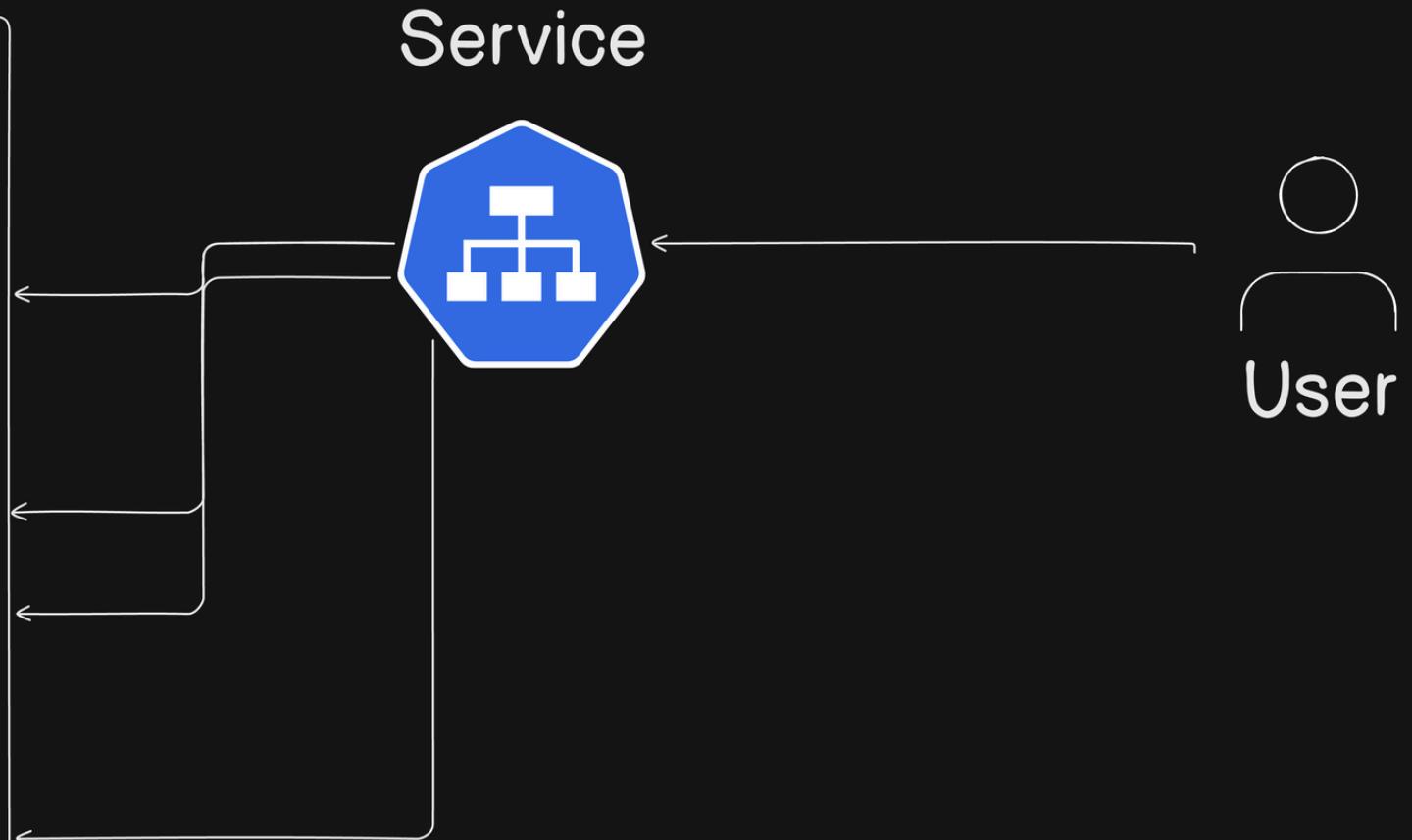
# What is a Deployment

4 replicas



# What is a Service?

Deployment

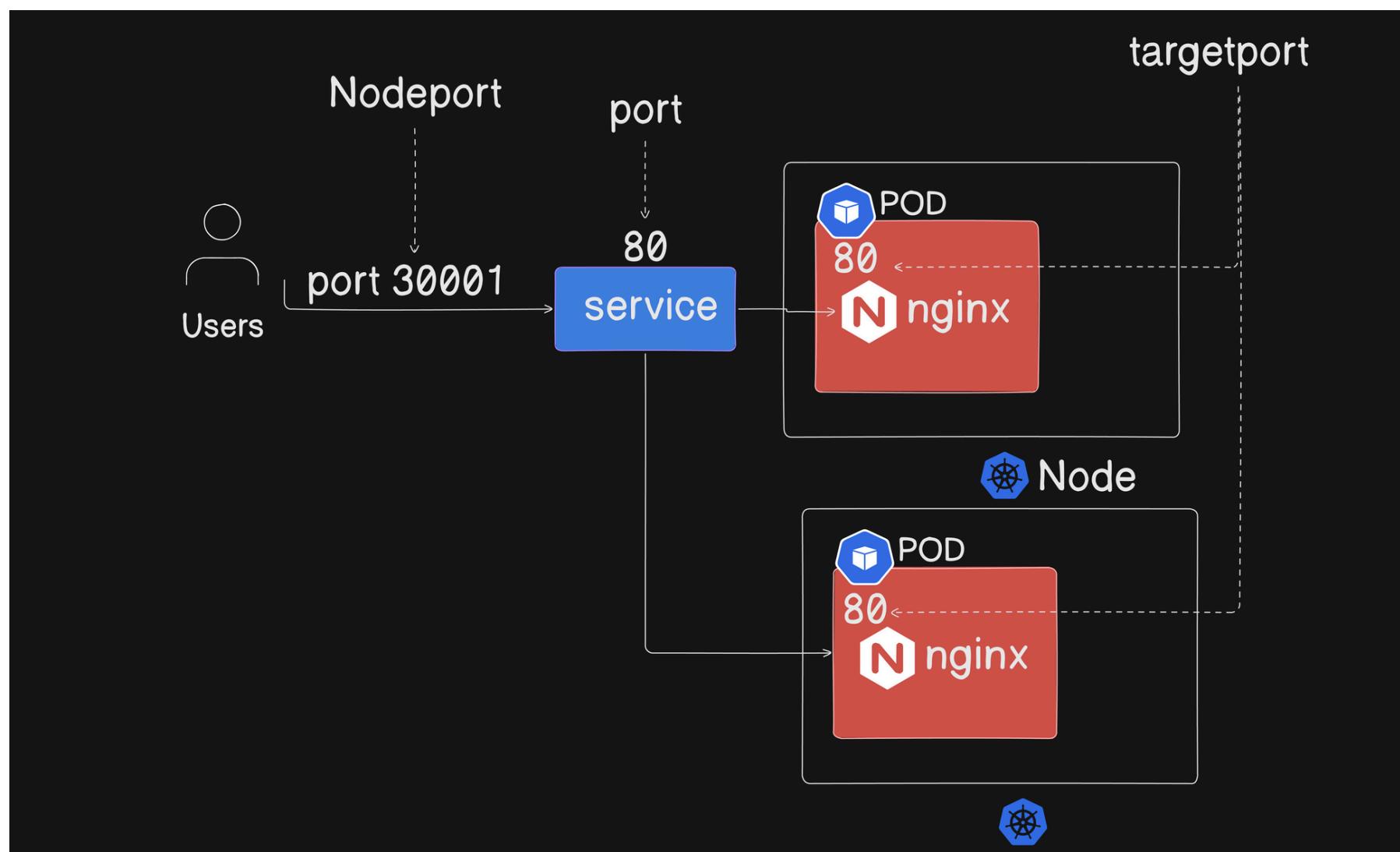
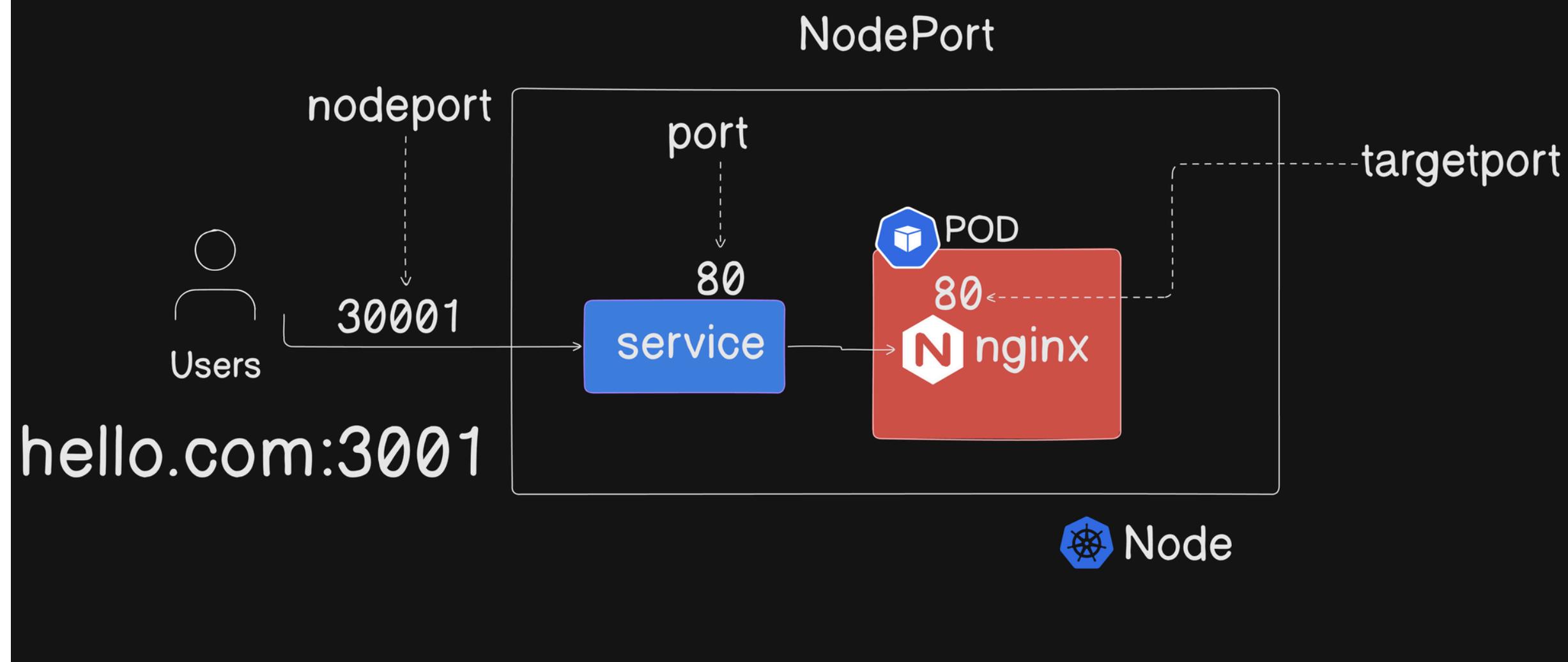


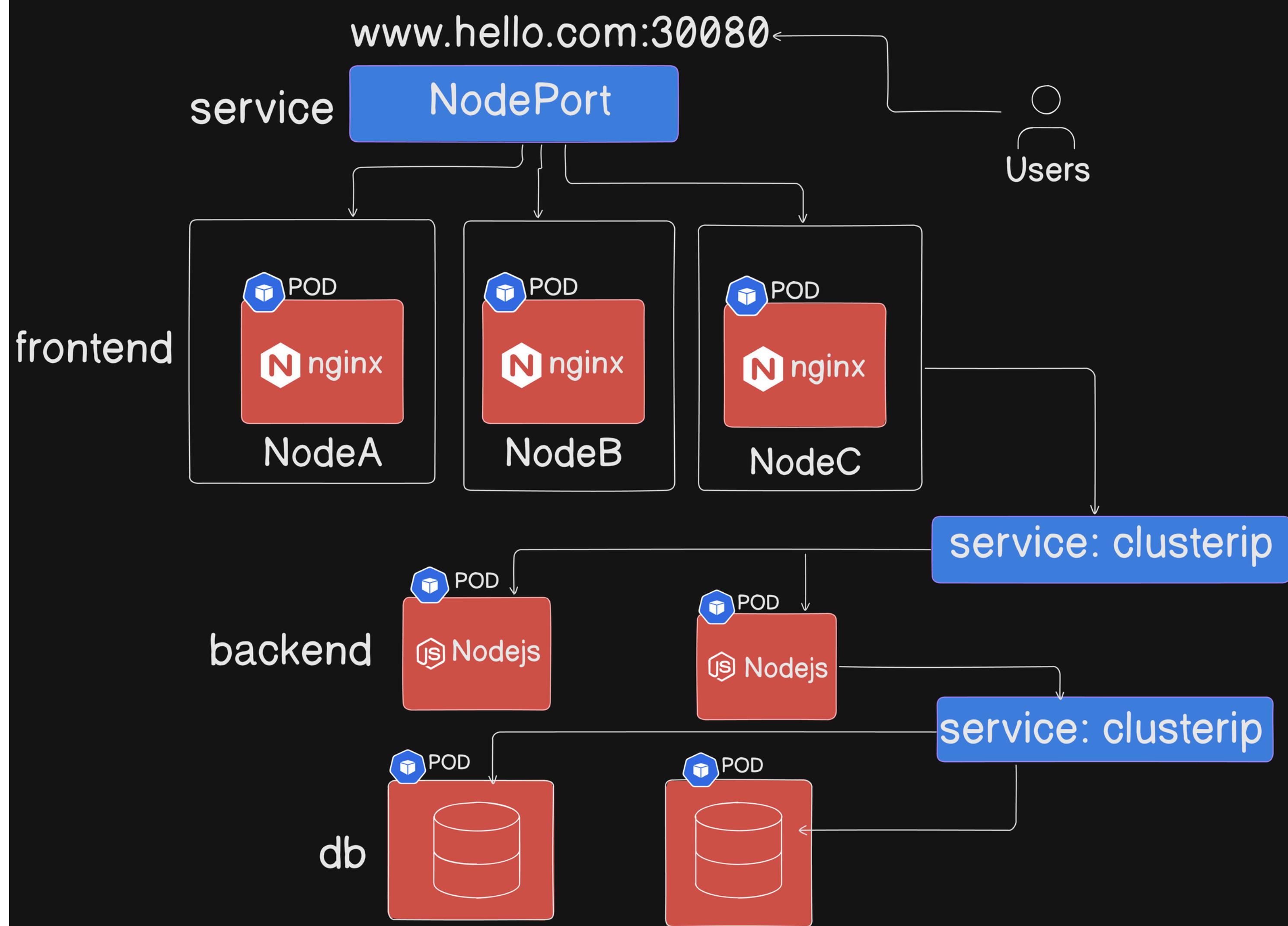
clusterIP - internal access

nodePort - specific port

loadbalancer - endpoint

externalname - custom domain





# nodeport/ loadbalancer

