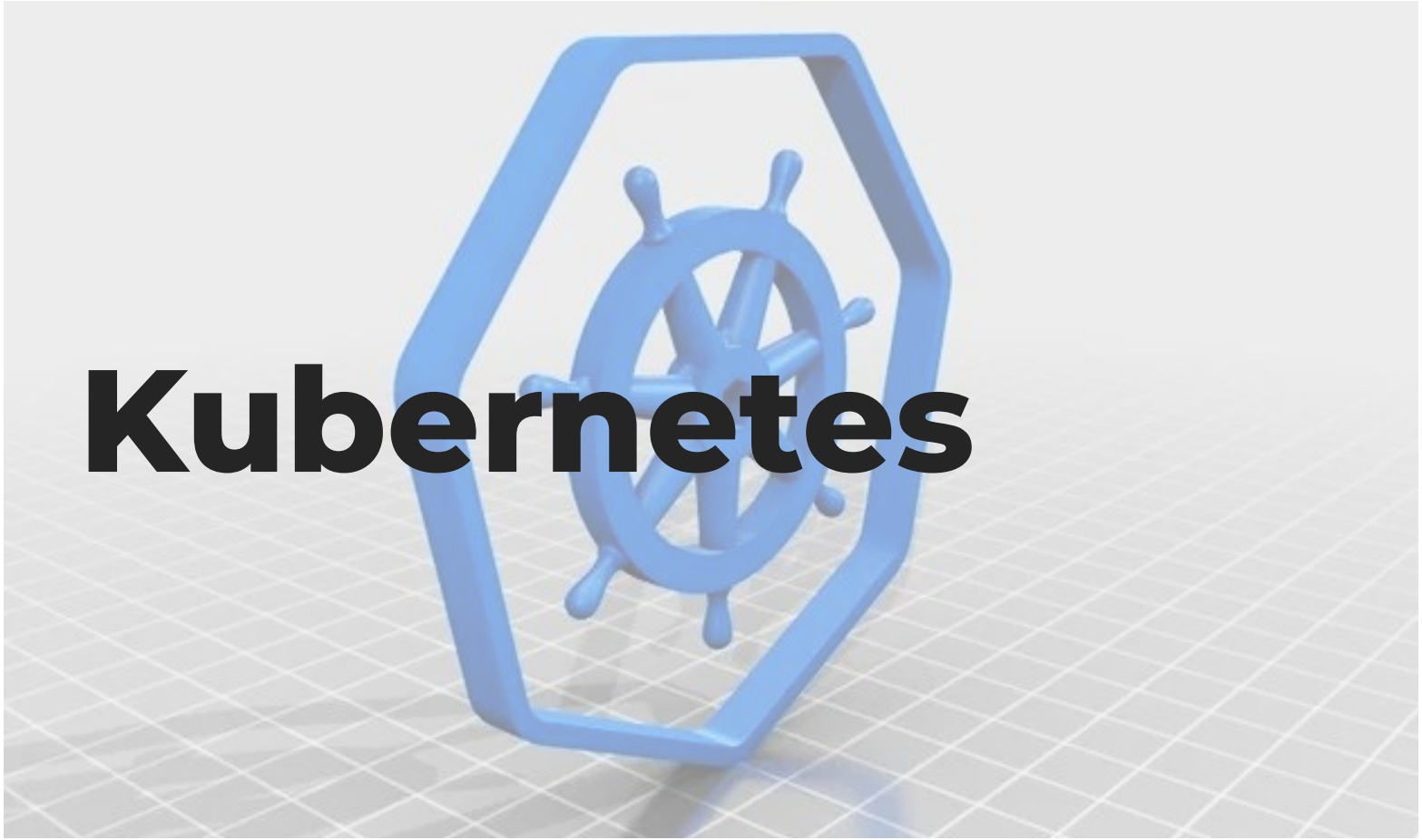
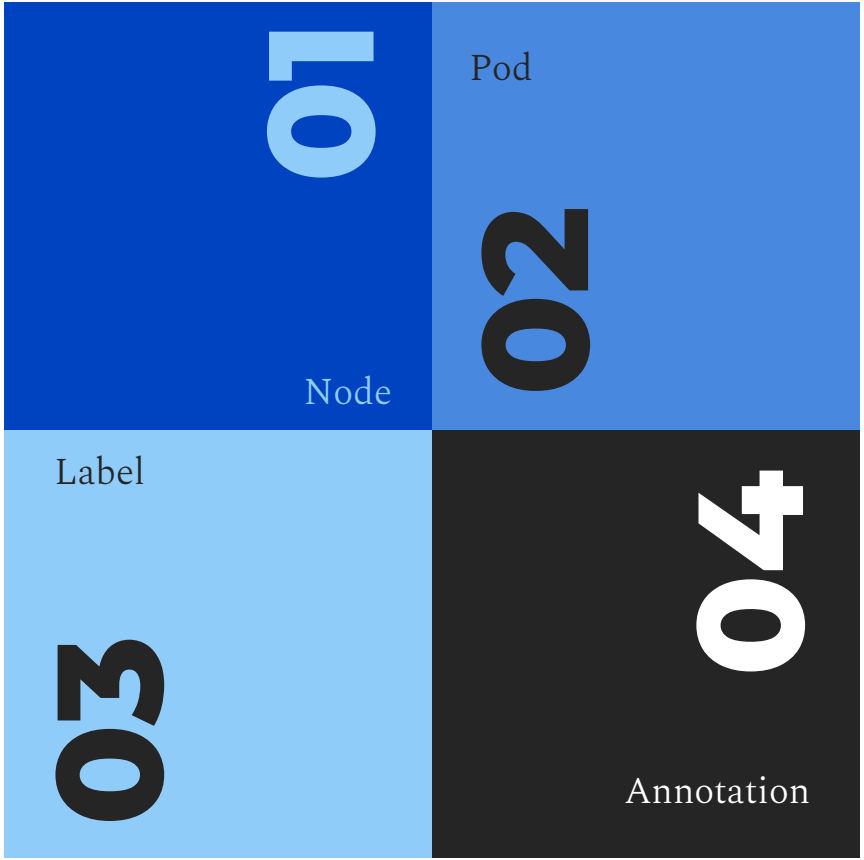
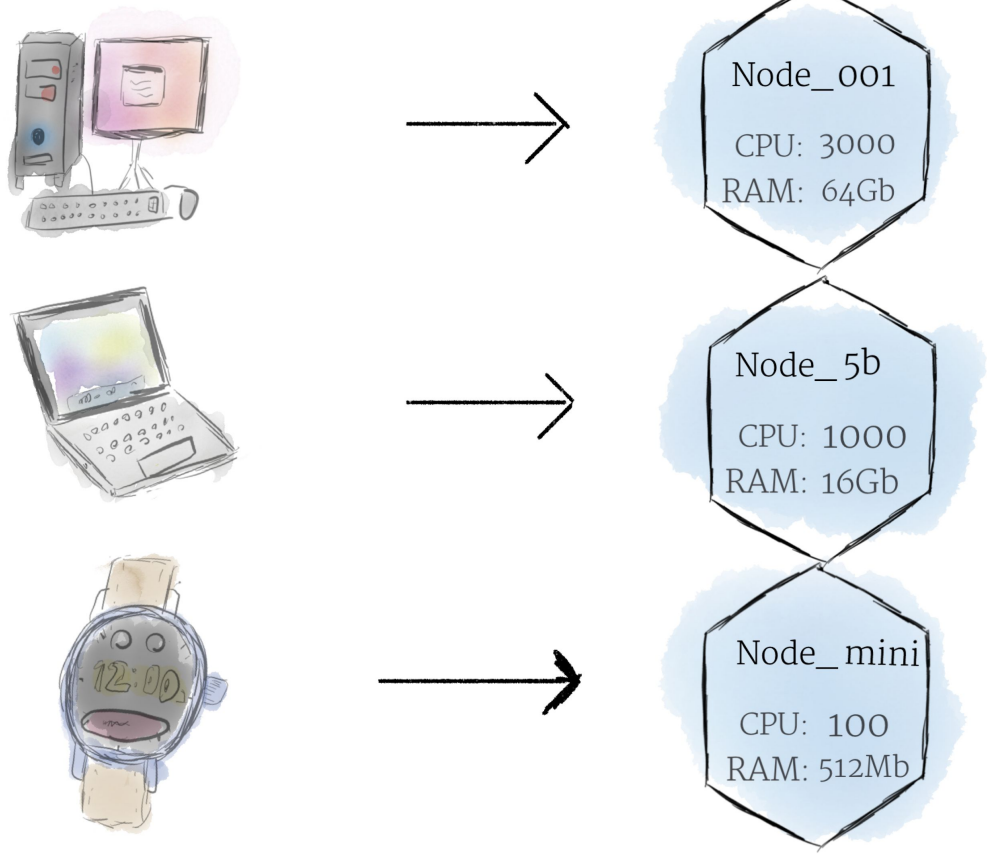

Kubernetes




# Agenda

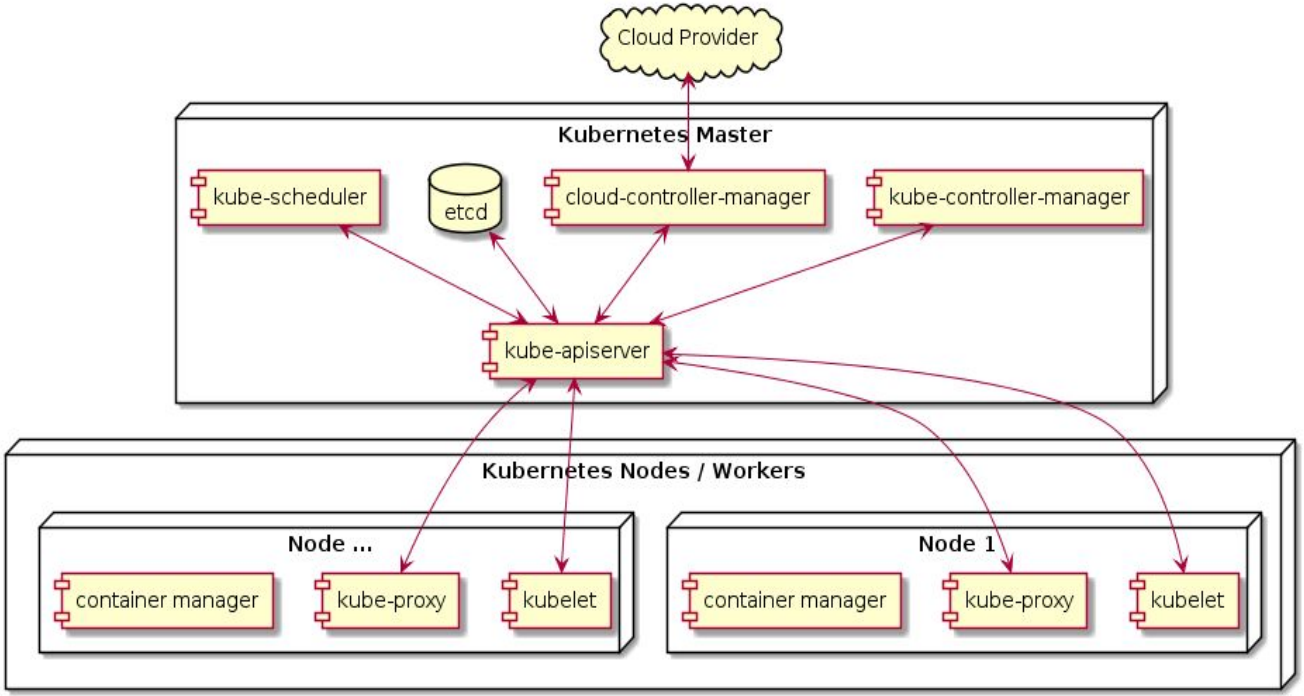
# 1. Nodes

Nodes is the smallest unit of computing hardware in Kubernetes.




# Nodes is the smallest unit of computing hardware in Kubernetes.

# Nodes


Cloud Provider
Kubernetes Master
kube-scheduler
etcd
cloud-controller-manager
kube-controller-manager
kube-apiserver
Kubernetes Nodes / Workers
Node ...
container manager
kube-proxy
kubelet
Node 1
container manager
kube-proxy
kubelet

# List Nodes

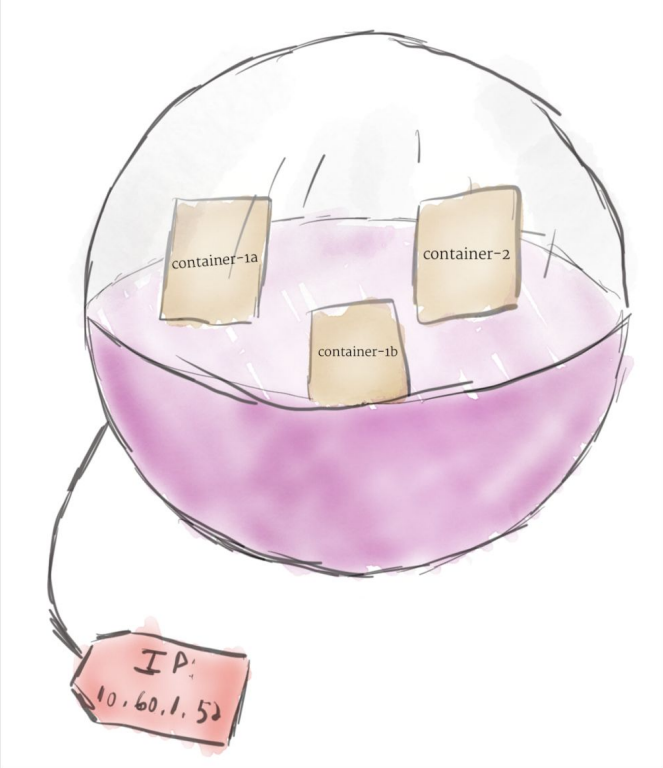
```
kubectl get node
```

# List Detail Nodes

```
kubectl describe node namanode
```

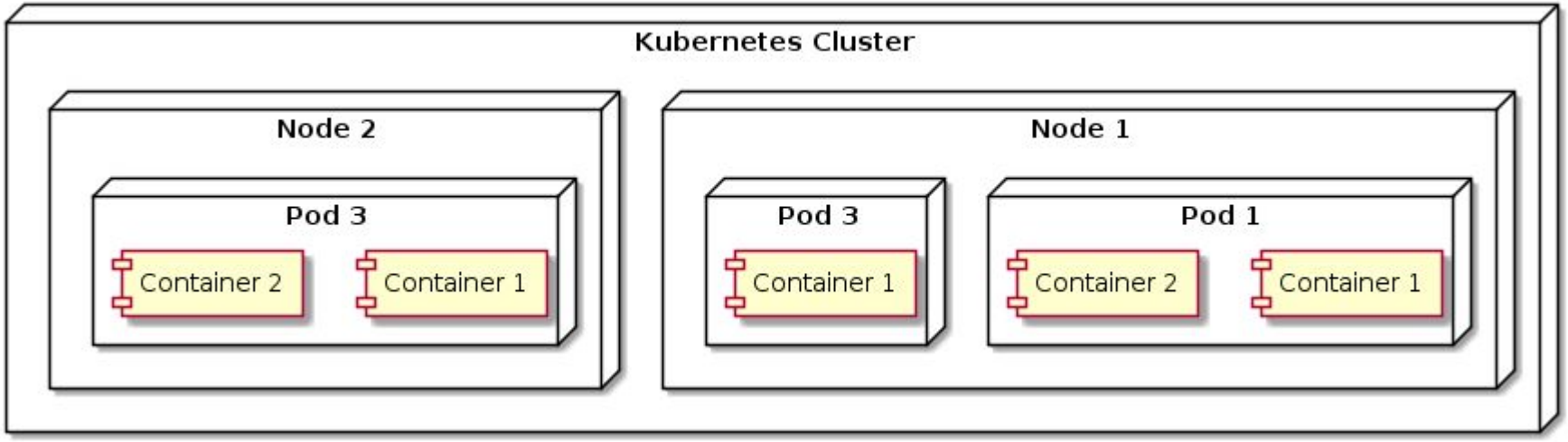
# 2. Pod

nstead it wraps one or more containers
into a higher-level structure called a pod.




# Kubernetes doesn't run containers directly; instead it wraps one or more containers into a higher-level structure called a pod.

# Pod


Kubernetes Cluster
Node 2
Pod 3
Container 2
Container 1
Node 1
Pod 3
Container 1
Pod 1
Container 2
Container 1

# List Pod

```
kubectl get pod
```

# List Detail Pod

```
kubectl describe pod namapod
```

# Create Pod - pod.yaml

```
apiVersion: v1
kind: Pod
metadata:
  name: pod-name
spec:
  containers:
    - name: container-name
      image: image-name
      ports:
        - containerPort: 80
```

# List Pod

```
kubectl get pod
kubectl get pod -o wide
kubectl describe pod namapod
```

# Access Pod

```
kubectl port-forward namapod
portAkses:portPod
kubectl port-forward namapod 8888:8080
```

# 3. Label

Labels are key/value pairs that are attached to objects, such as pods.

# Label in Pod

```
kubectl create -f namafile.yaml
kubectl get pods --show-labels
```

# Add or Rename Pod

```
kubectl label pod namapod key=value
kubectl label pod namapod key=value
--overwrite
```

# Search Pod use Label

```
kubectl get pods -l key
kubectl get pods -l key=value
kubectl get pods -l ‘!key’
kubectl get pods -l key!=value
kubectl get pods -l ‘key in
(value1,value2)’
kubectl get pods -l ‘key notin
(value1,value2)’
```

# Search Pod use any Label

```
kubectl get pods key,key2=value
kubectl get pods key=value,key2=value
```

# 4. Annotation

Kubernetes annotations to attach arbitrary non-identifying metadata to objects.

# Add Annotation to Pod

```
kubectl annotate pod namapod key=value
kubectl annotate pod namapod key=value
--overwrite
```


Thanks!