Kubernetes Course 2021: Pelado Nerd

Kubernetes:

deployment
pod 1:
- container
- container
replicas: 3
pod 2:
- container3
replicas: 2

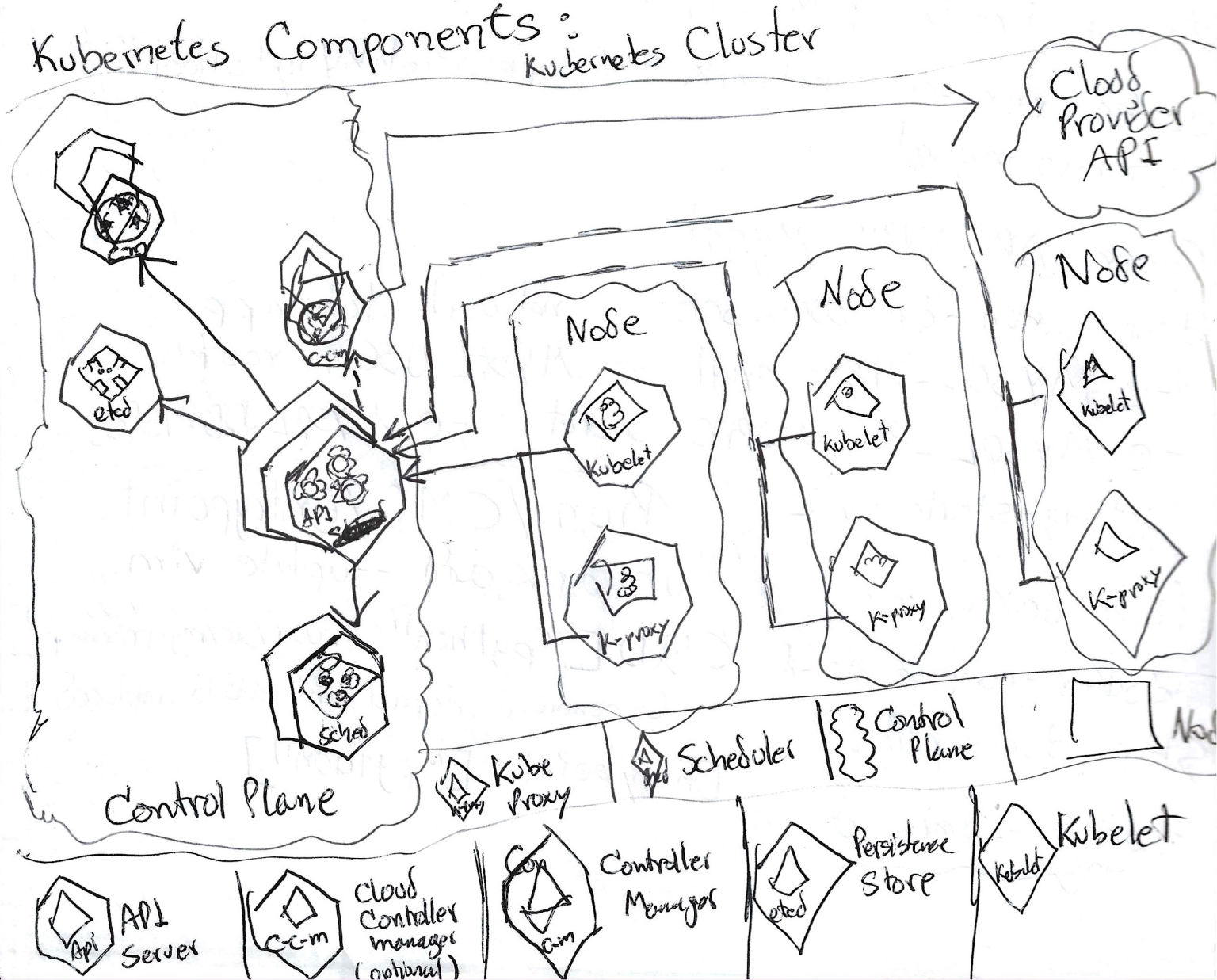
API
Servicios de cluster de Kubernetes

K p2r2 worker
p2r2 p1r1

K p2r2 worker

p1r3 worker
K p2r2

Kubernetes Components:



Commands

* Kubectl get nodes
* Kubectl config get-contexts
* Kubectl get ns (namespace)
* Kubectl -n <namespace> get pods -o wide
* Kubectl -n <namespace> delete pod <pod-name>
* Kubectl apply -f <manifest>
* Kubectl exec -it <pod-name> -- sh
* Kubectl get pod <pod-name> -o yaml
* Kubectl delete -f <manifest>
* Kubectl describe pod <pod-name>
* Kubectl get all
* Kubectl get ing
* Kubectl -n ingress-nginx get svc
* Kubectl logs -f <pod-name>
* stern <pod_name>

Namespace: División lógica del cluster de kubernetes.

Pod: Set de contenedores

1000m -> 1 core

request -> garanty

limits -> Max resources

pods de sistema usan recurso

readinesProbe: -> Decirle a kubernetes que el pod esta ready

```
httpGet:
  path: /
  port: 80
initialDelaySeconds: 5
periodSeconds: 10
```

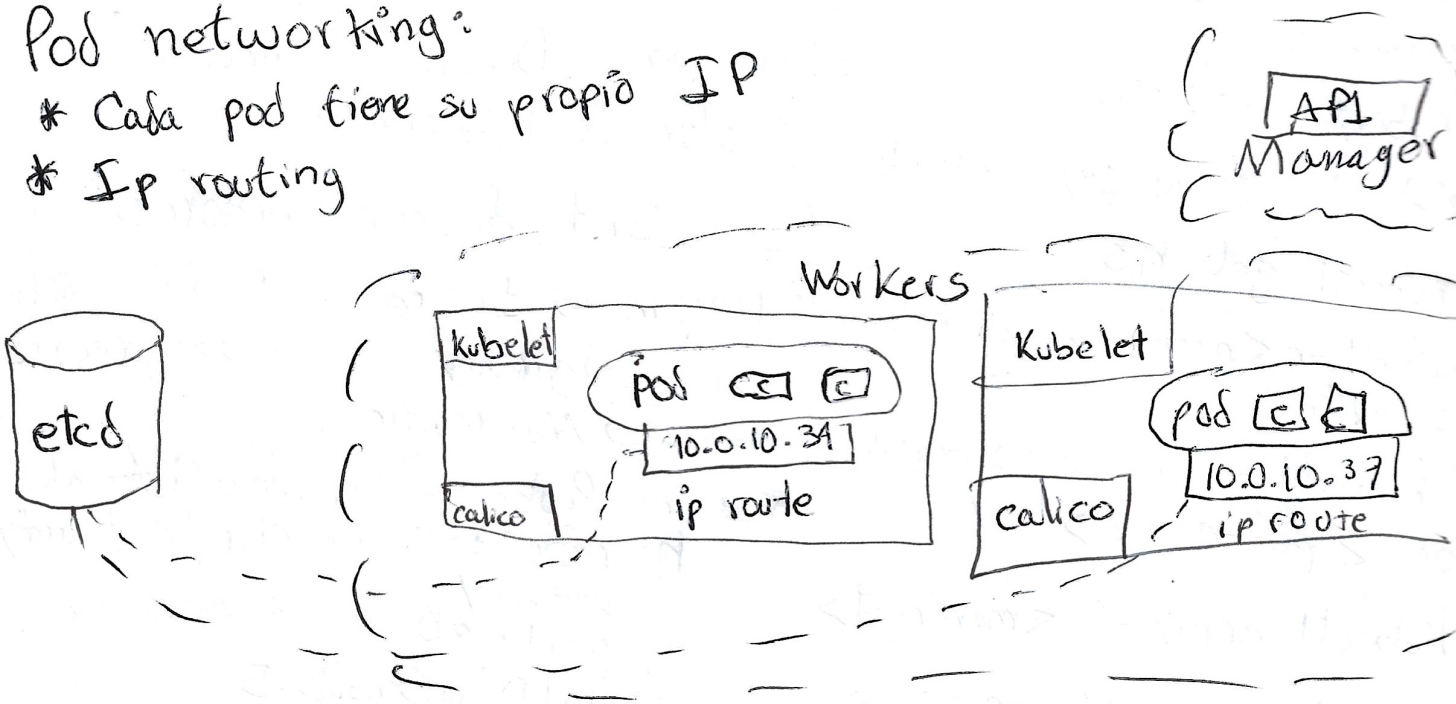
livenessProbe: -> decirle a Kubernetes que el pod esta vivo

```
tcpSocket:
  port: 80
initialDelaySeconds: 15
periodSeconds: 20
```

```
ports:
- containerPort: 80
```

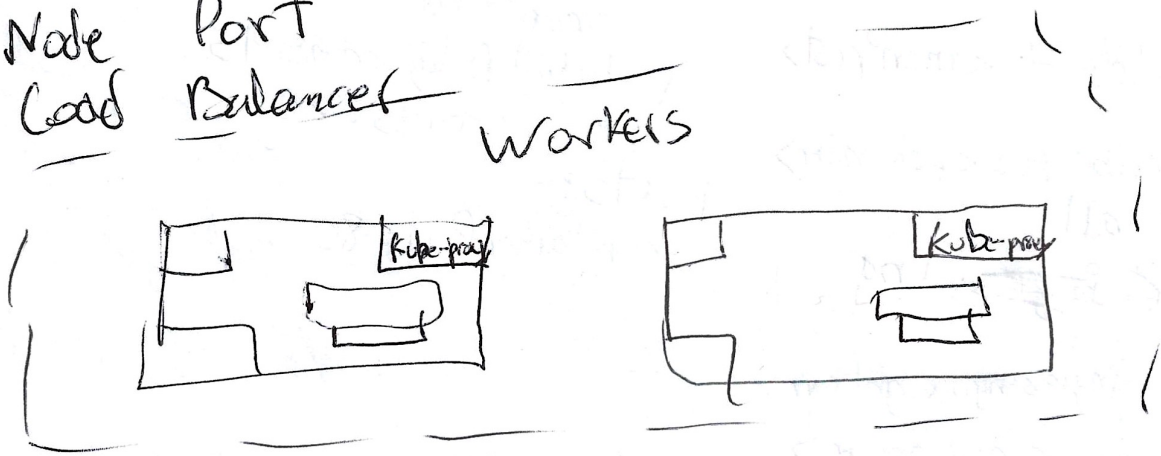
Pod networking:

* Cada pod tiene su propio IP
* Ip routing



Kubernetes Services: Kube-proxy

* Cluster IP
* Node Port
* Load Balancer



Ingress: Permite crear accesos a nuestros servicios basados en el Path. Kubernetes hace un deploy de un controlador nginx, para manejar el trafico.