

# Contenedores y sistemas distribuidos: redes y monitoreo.



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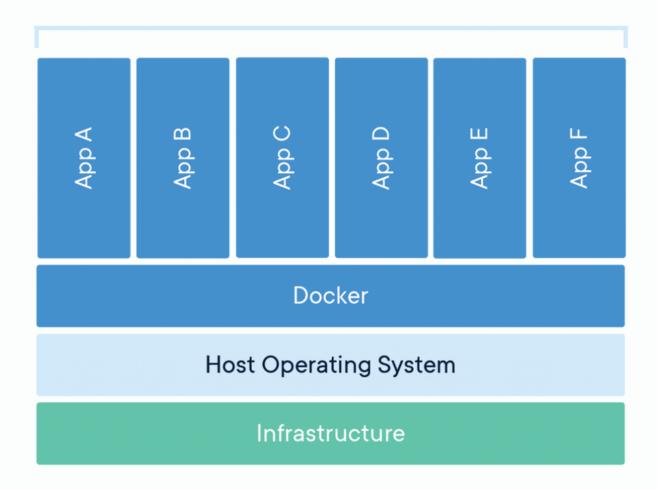


#### Que son los contenedores?

OS virtualization

Codigo y dependencias OS

#### **Containerized Applications**





#### Limitaciones

T Seguridad

Orquestracion contenedores

Perdida de funcionalidades del SO

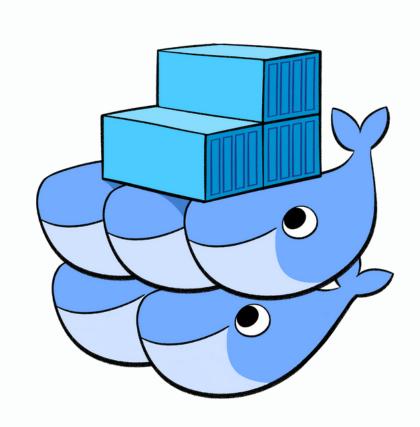
Manejo de procesos hijo

No hypervisor type 1

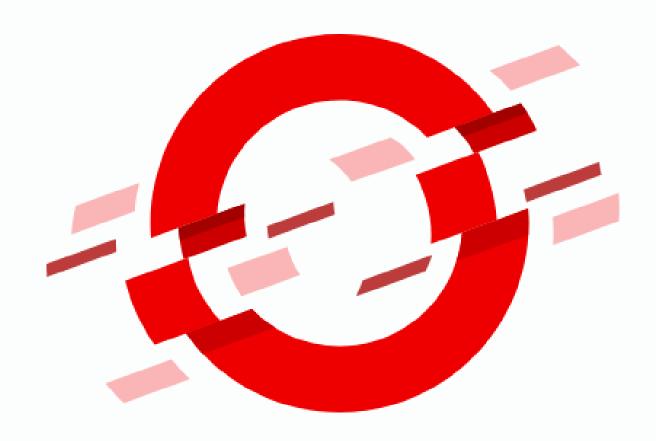




## Systemas de manejo de contedores









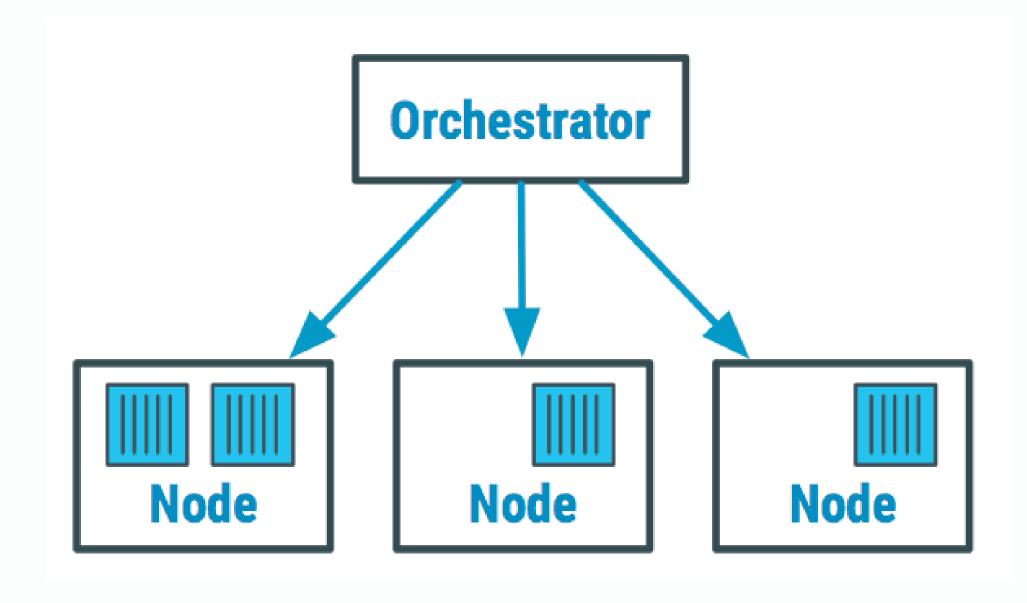
## Orquestracion contenedores

Despliege de contedores

Escalado de contedores

Manejo de contedores

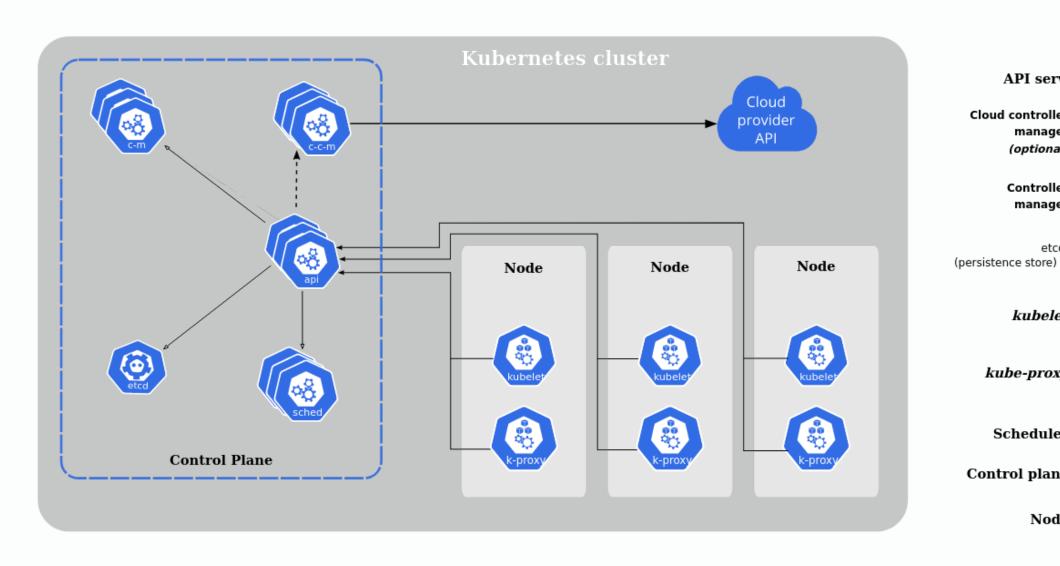
Gestion del cluster





#### Kubernetes cluster

Control plane Nodes



**Cloud controller** 

Controller

kube-proxy

Scheduler

Node

Control plane



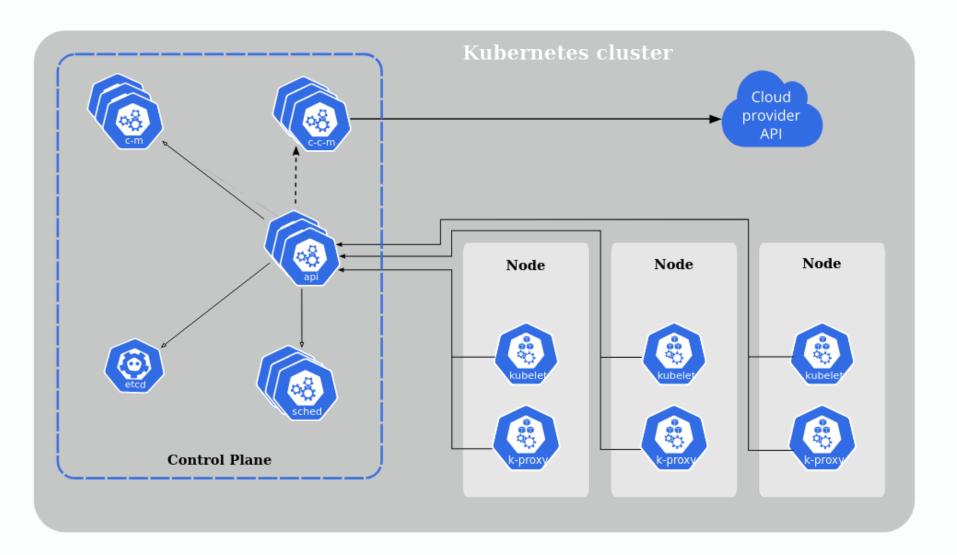
### componentes control plane

kube-apiserver

etcd

kube-scheduler

kube-controller-manager



Cloud controller

(persistence store)

(optional)

Controller

Scheduler

Node

Control plane

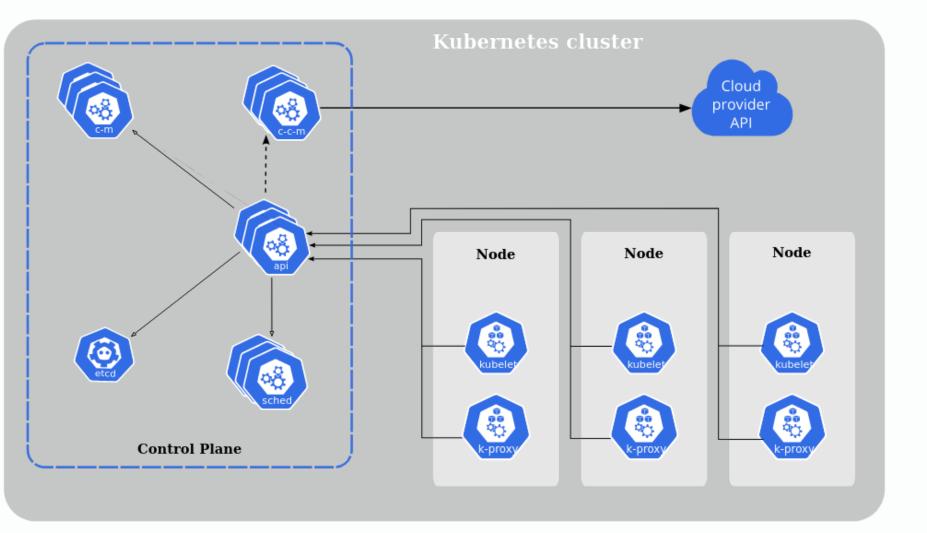


### Componentes nodo

kubelet

kube-proxy

Container runtime





Cloud controller manager (optional)











kube-proxy





Node



## Objectos kubernetes

Deployments

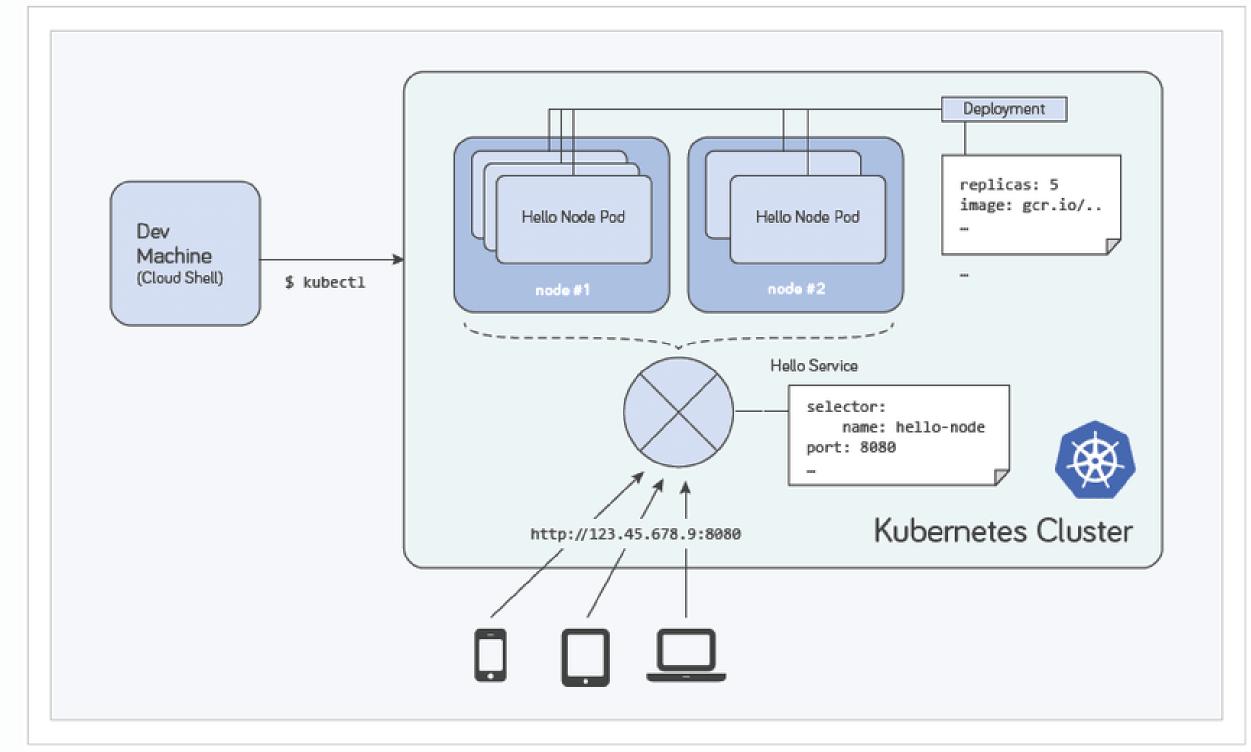
Pods

Servicios

DaemonSet

Volumes

Ingress



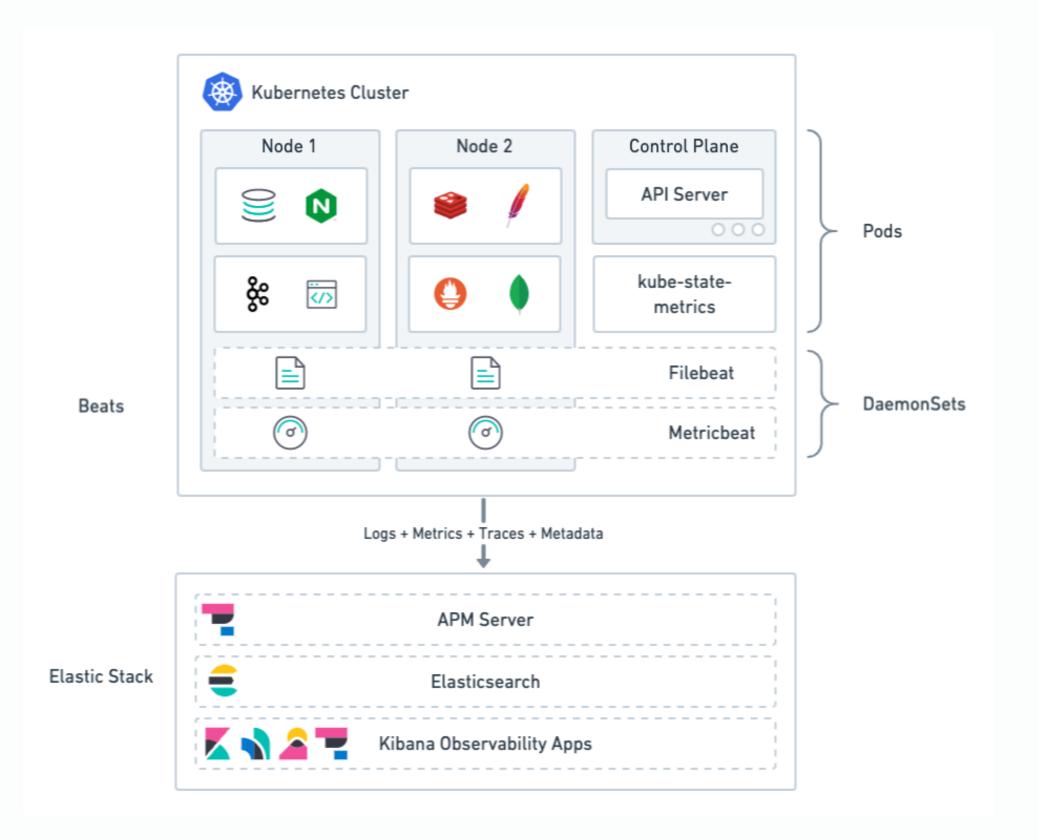


#### Monitoreo

Observabilidad

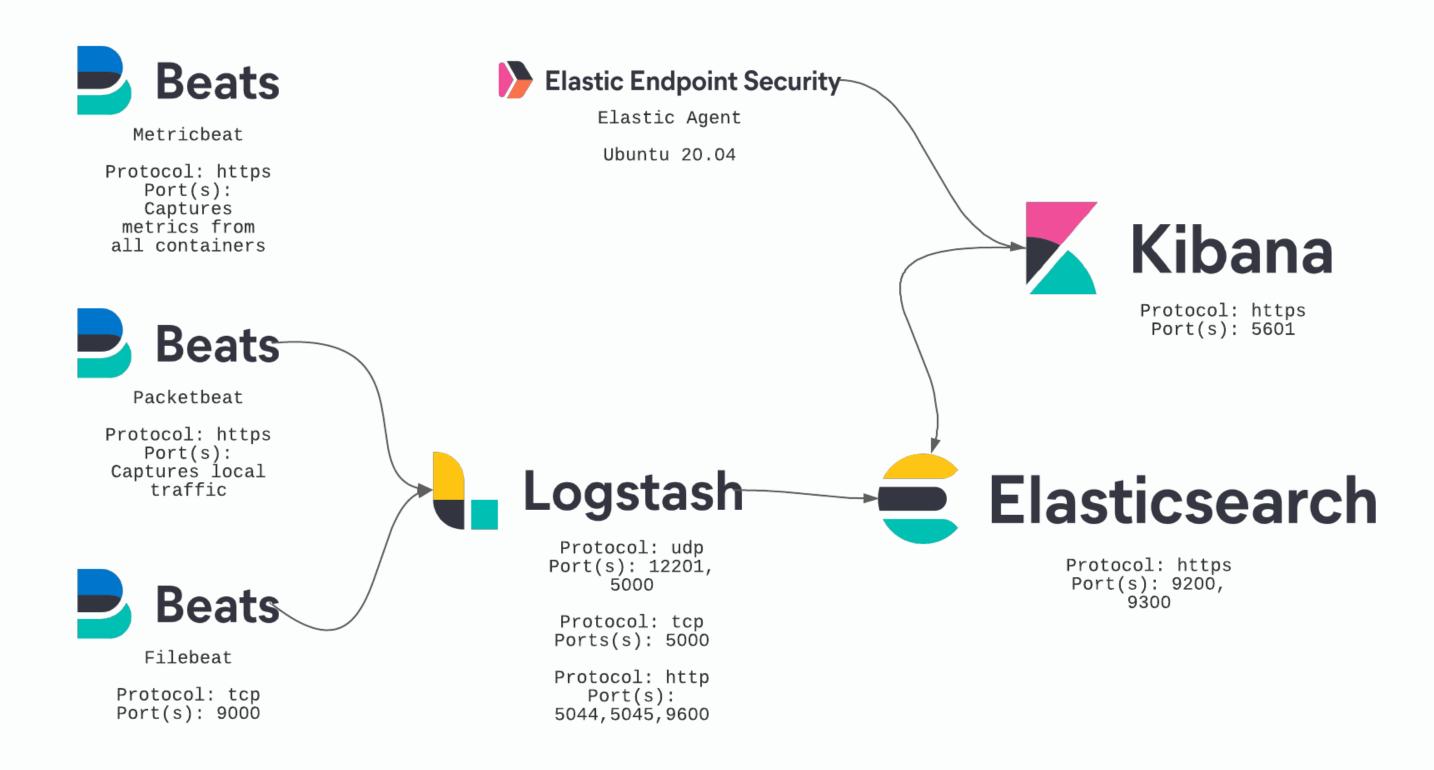
Logging

Tracing



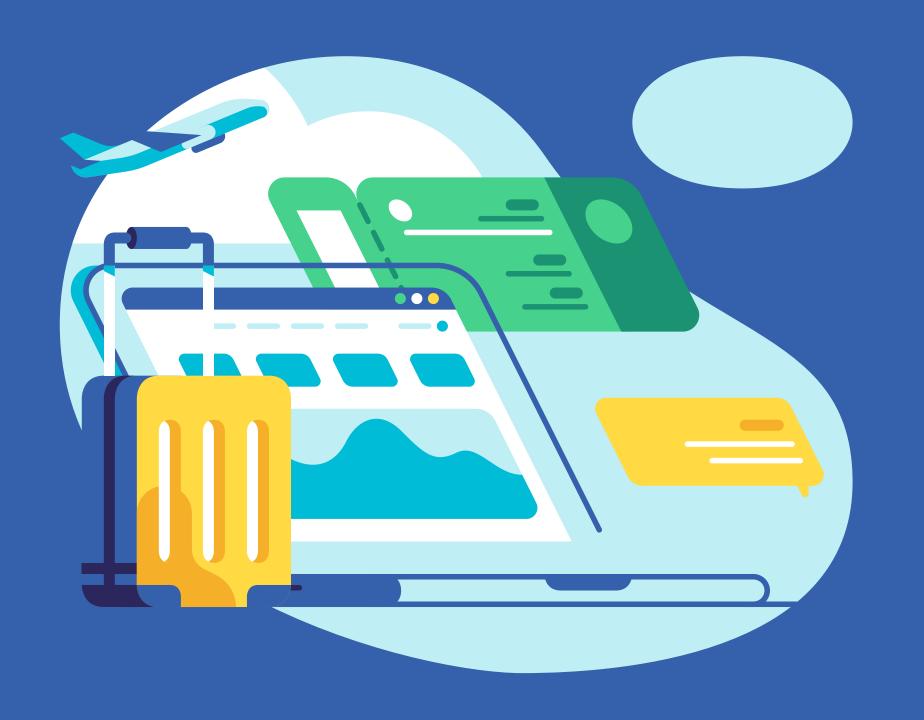


## **Monitoring ELK**











# Lets try it!

















# Ask me anything







