

LEONEL AGUILAR
SISTEMAS OPERATIVOS 1
CLASE 11

Kubernetes y Redis

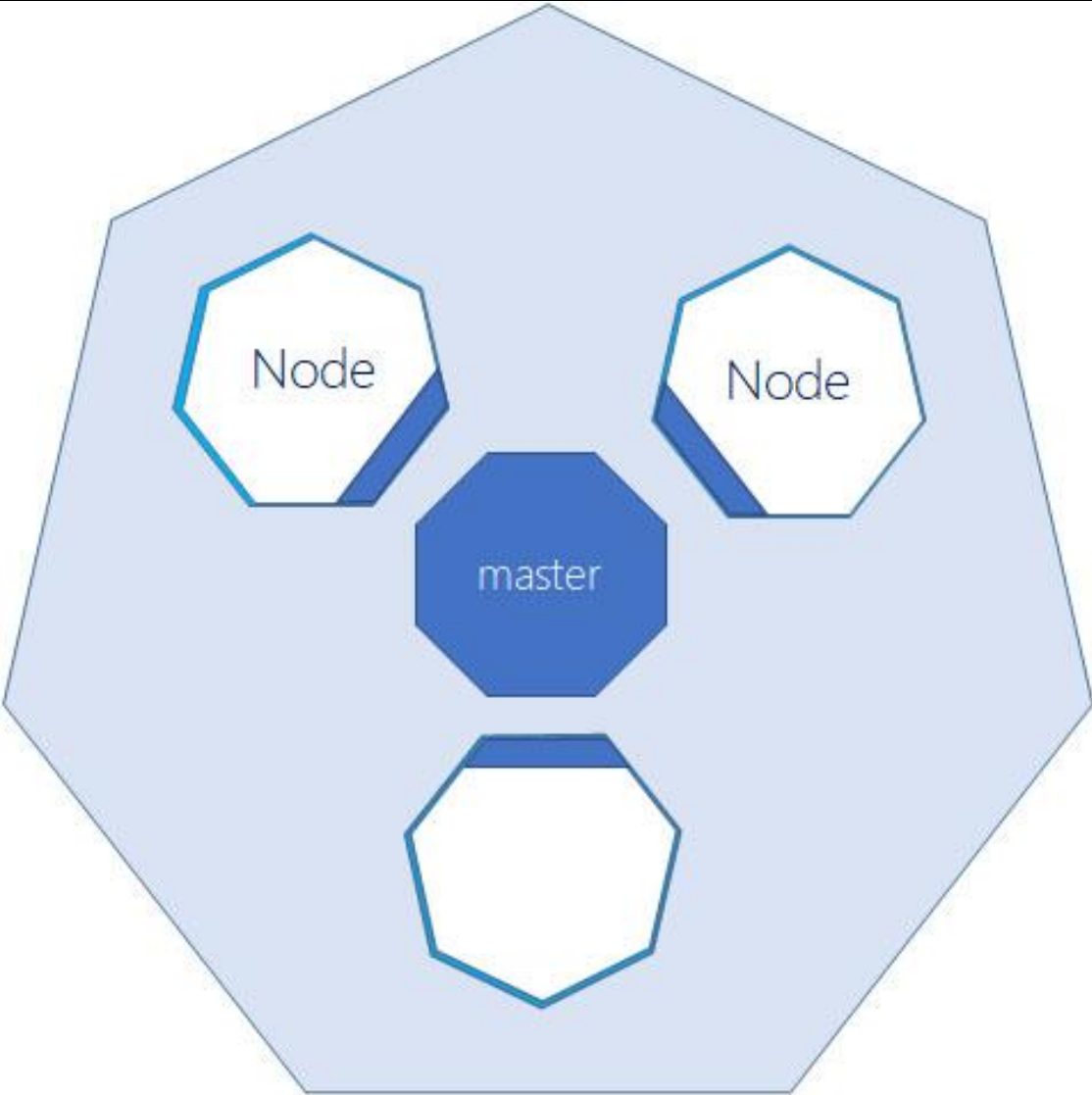
Objetos, Servicios. Utilizando Redis

AGENDA

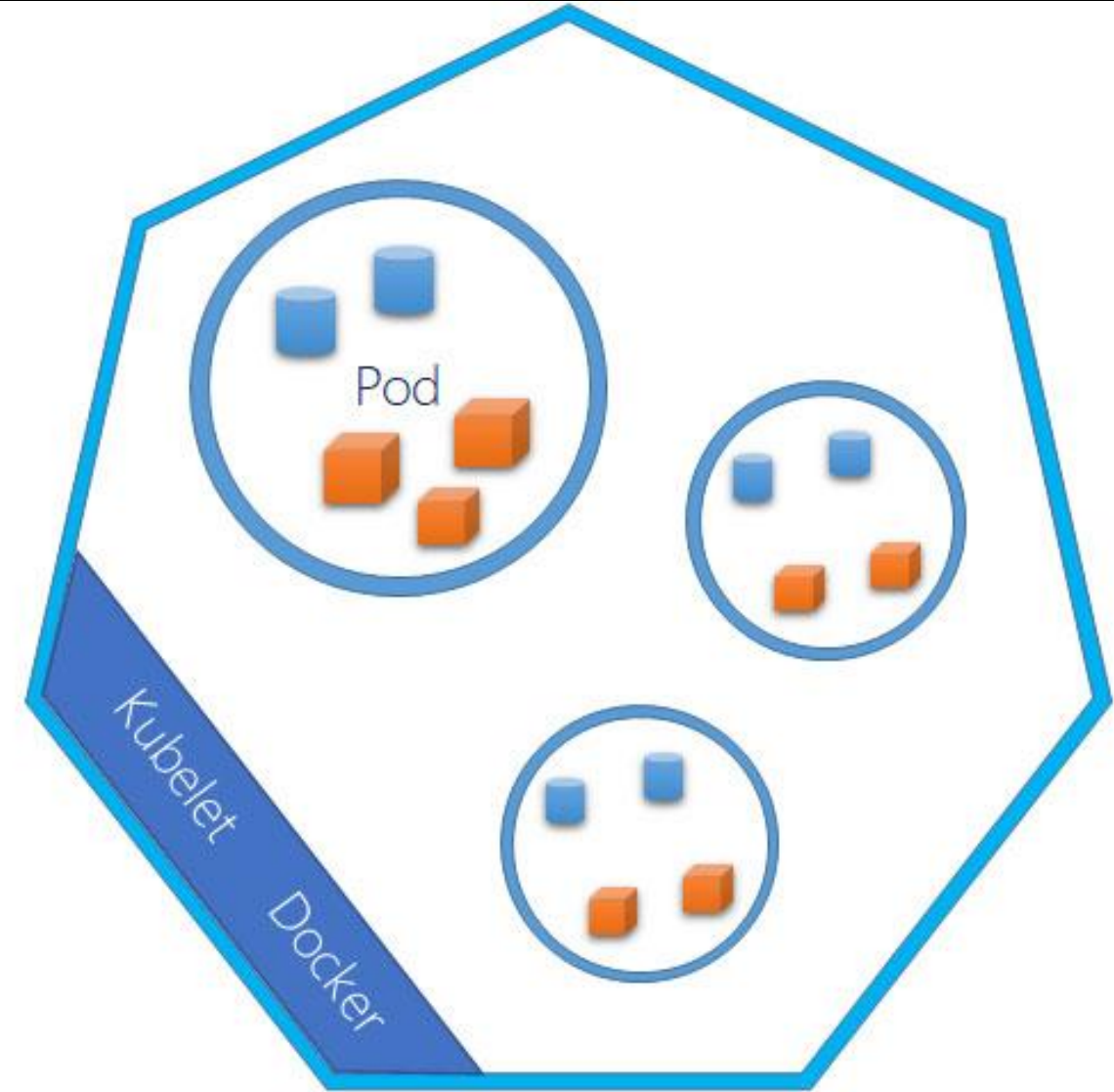
1. Algunos otros conceptos de Kubernetes
2. Conceptos de Redis
3. Utilizando Redis...
4. Kahoot

KUBERNETES

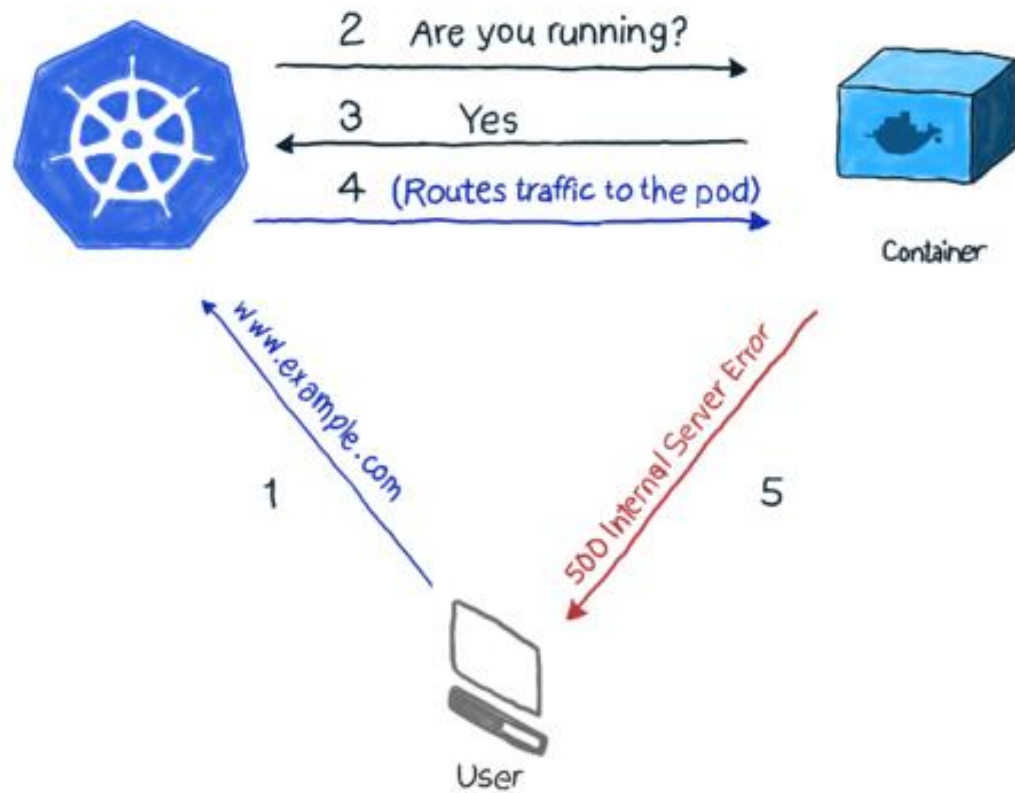




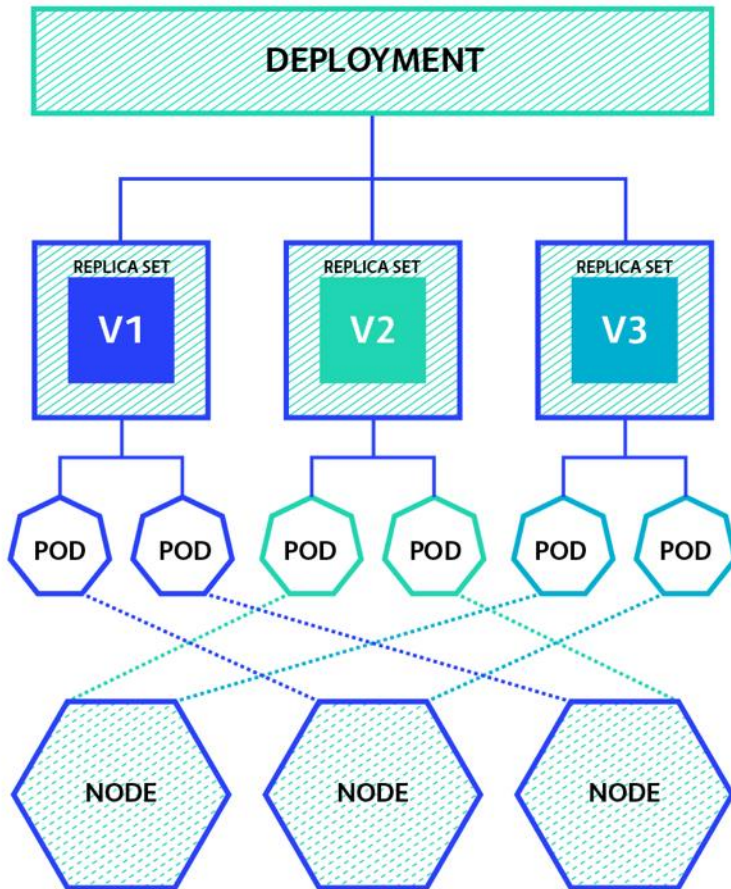
Kubernetes Cluster



Kubernetes Node



Controladores

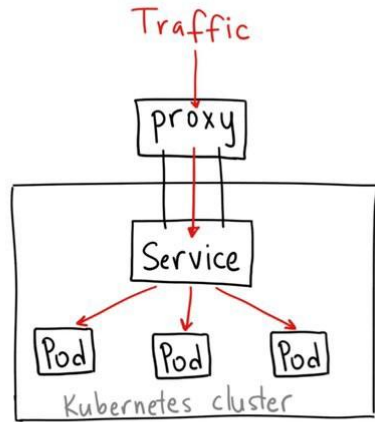


Deployments

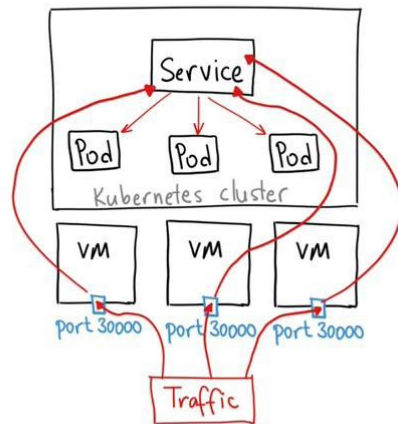
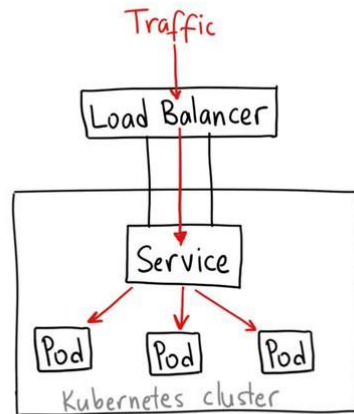
```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: node-deployment
  labels:
    app: node
spec:
  replicas: 3
  selector:
    matchLabels:
      app: node
  template:
    metadata:
      labels:
        app: node
    spec:
      containers:
        - name: node
          image: node:12
          ports:
            - containerPort:3000
```

Deployments

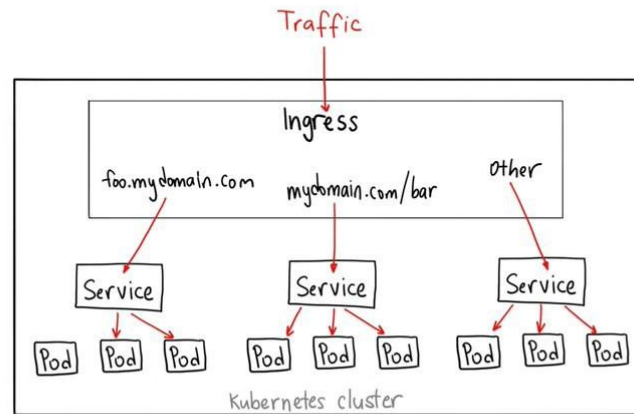
ClusterIP



LoadBalancer



NodePort



Ingress

Services


```
apiVersion: v1
kind: Service
metadata:
  name: node-service
spec:
  selector:
    app: node
  ports:
    - protocol: TCP
      port: 80
      targetPort: 3000
```

Services



kubernetes

Service 1



Service 2

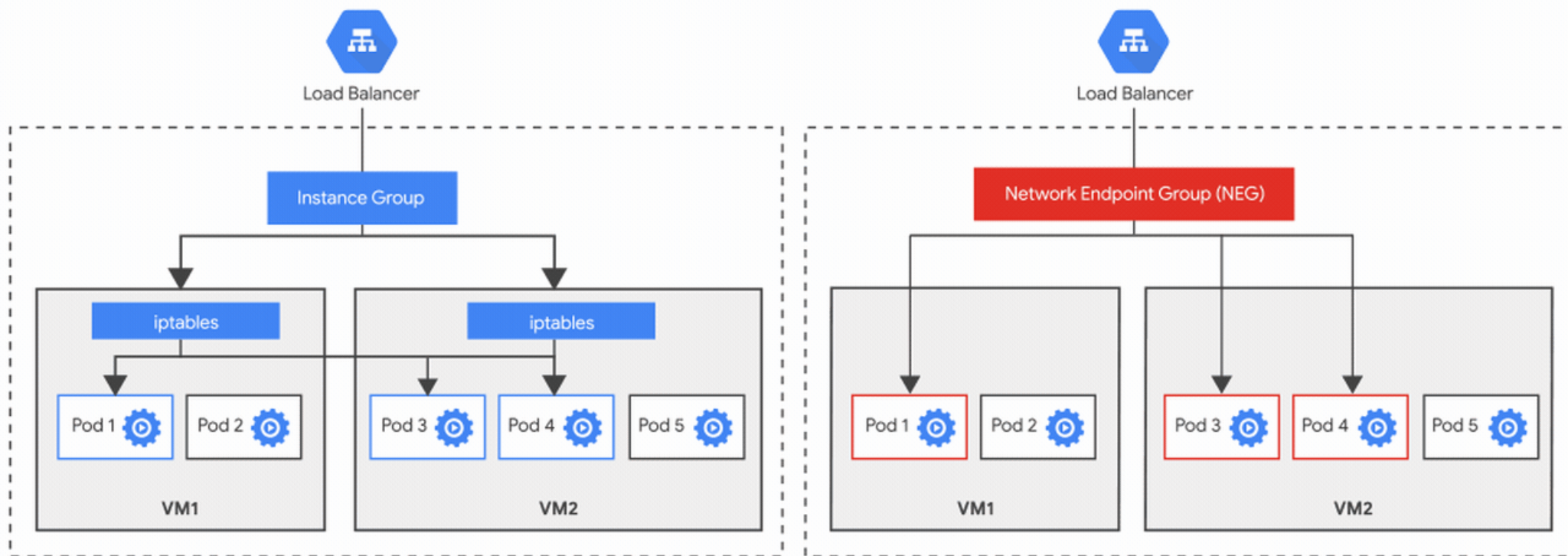


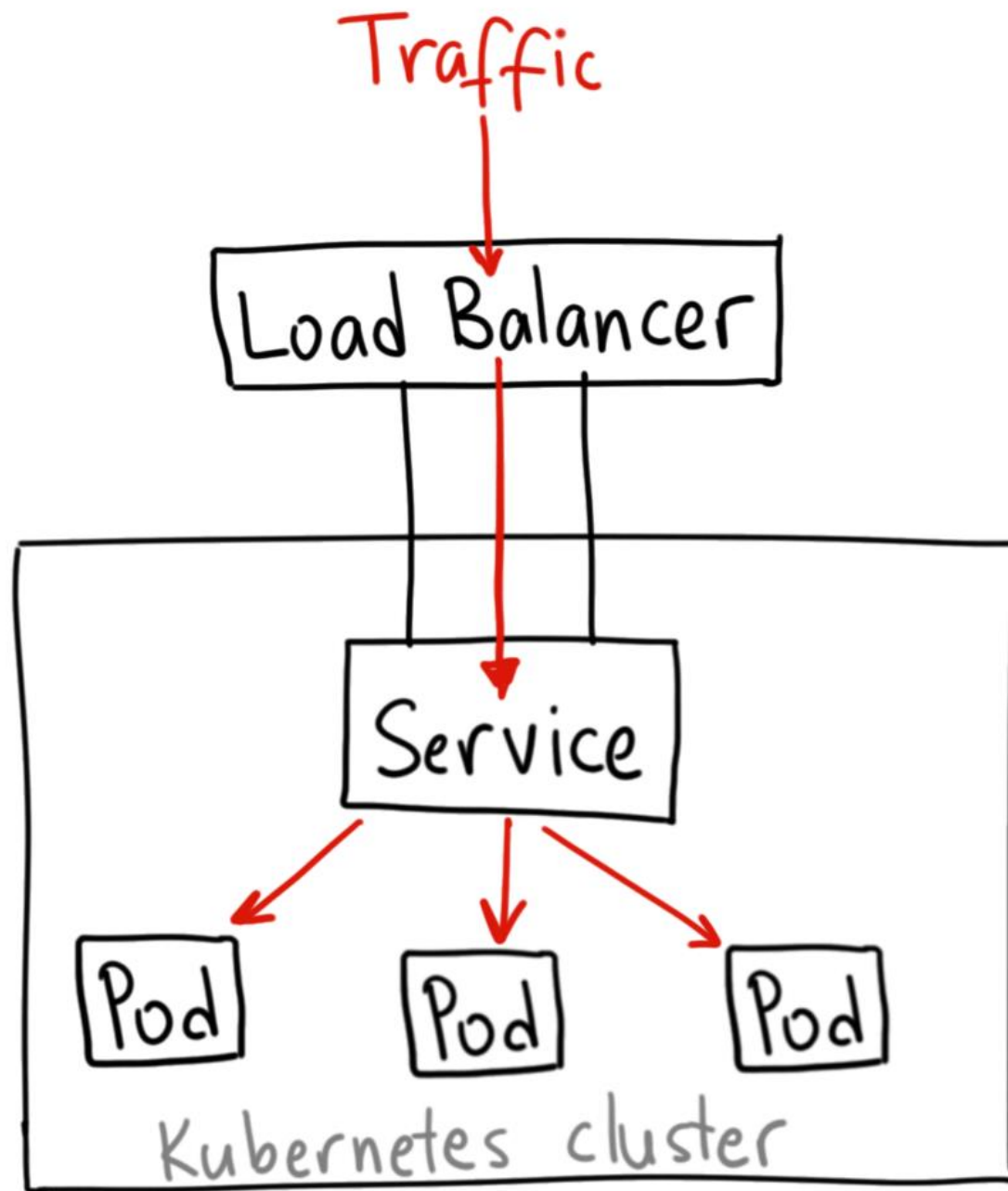
Service 3



Service 4







Namespace

Namespace 1

Service

IP address: 80

Pod 1

Pod 2

ReplicationSet/
Replication Controller

Namespace 2

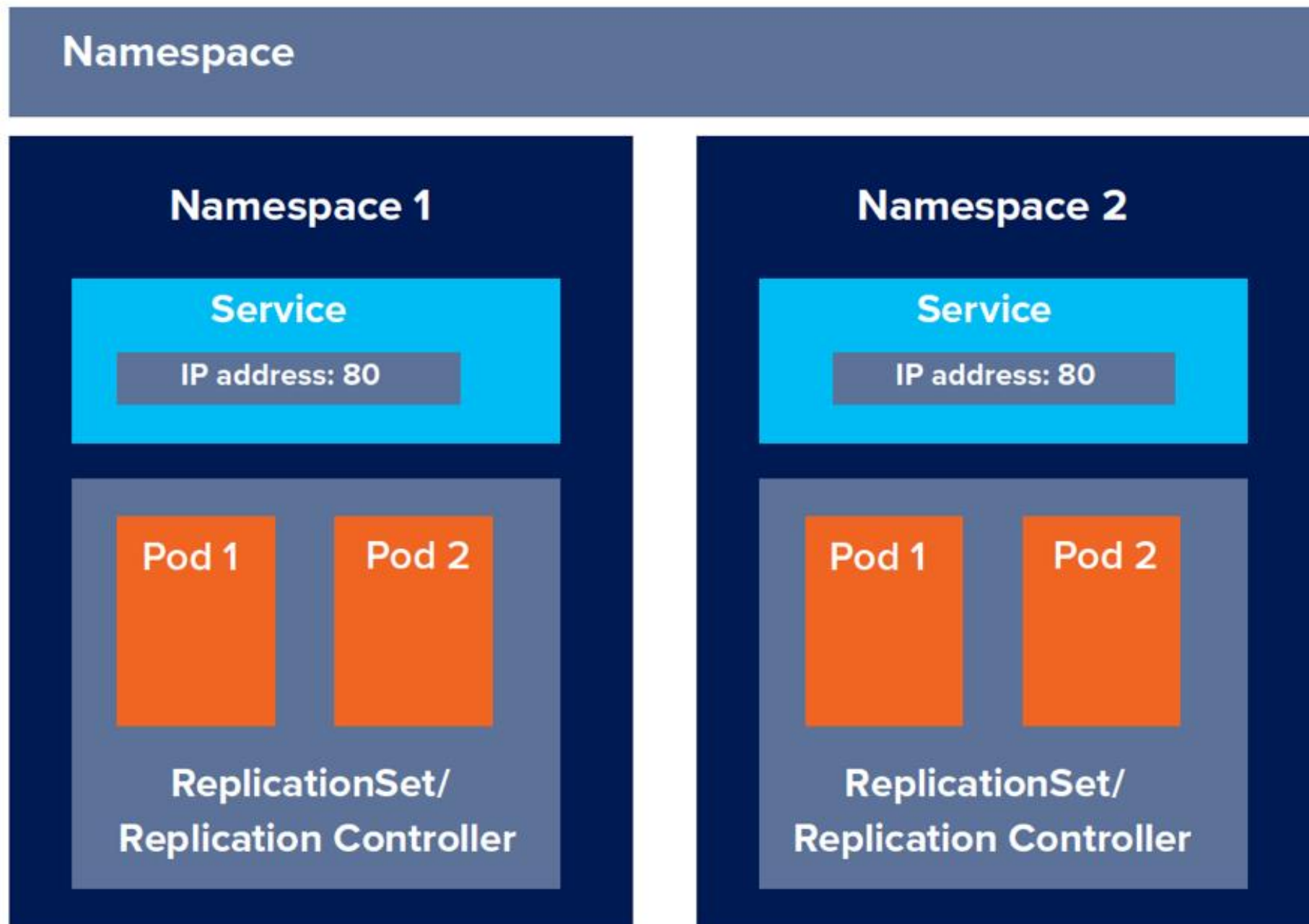
Service

IP address: 80

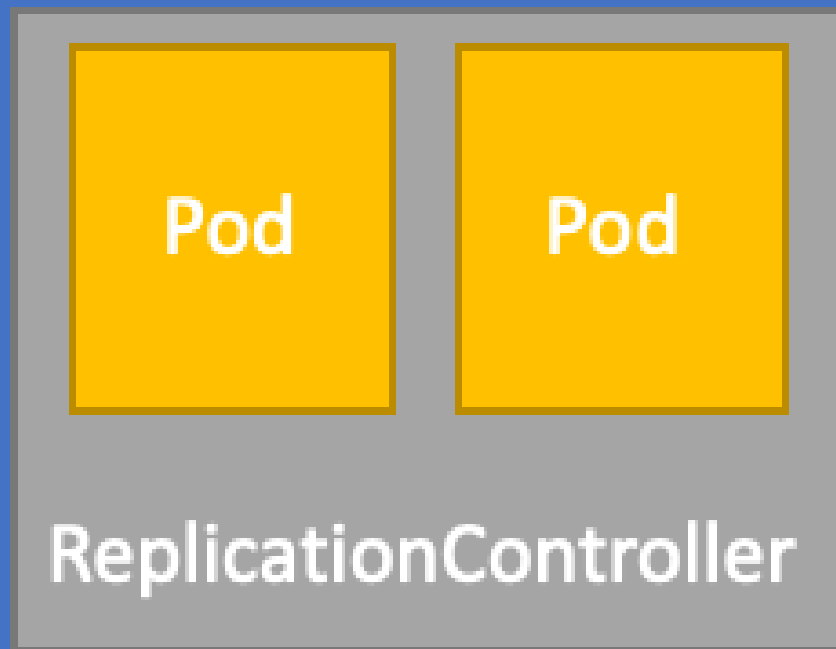
Pod 1

Pod 2

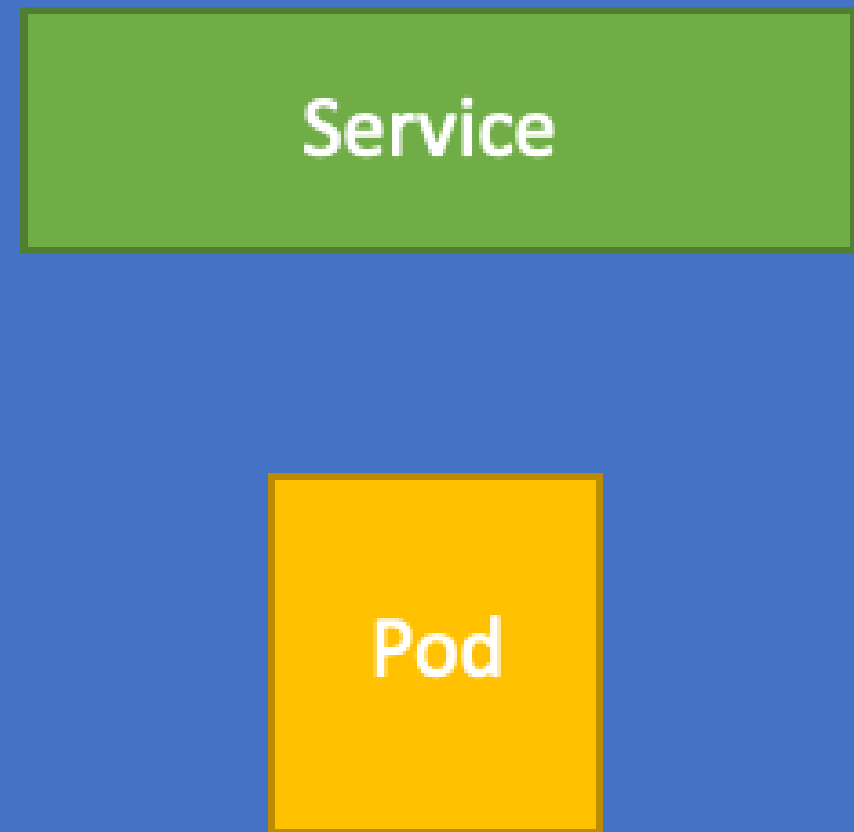
ReplicationSet/
Replication Controller



Namespace 1



Namespace 2

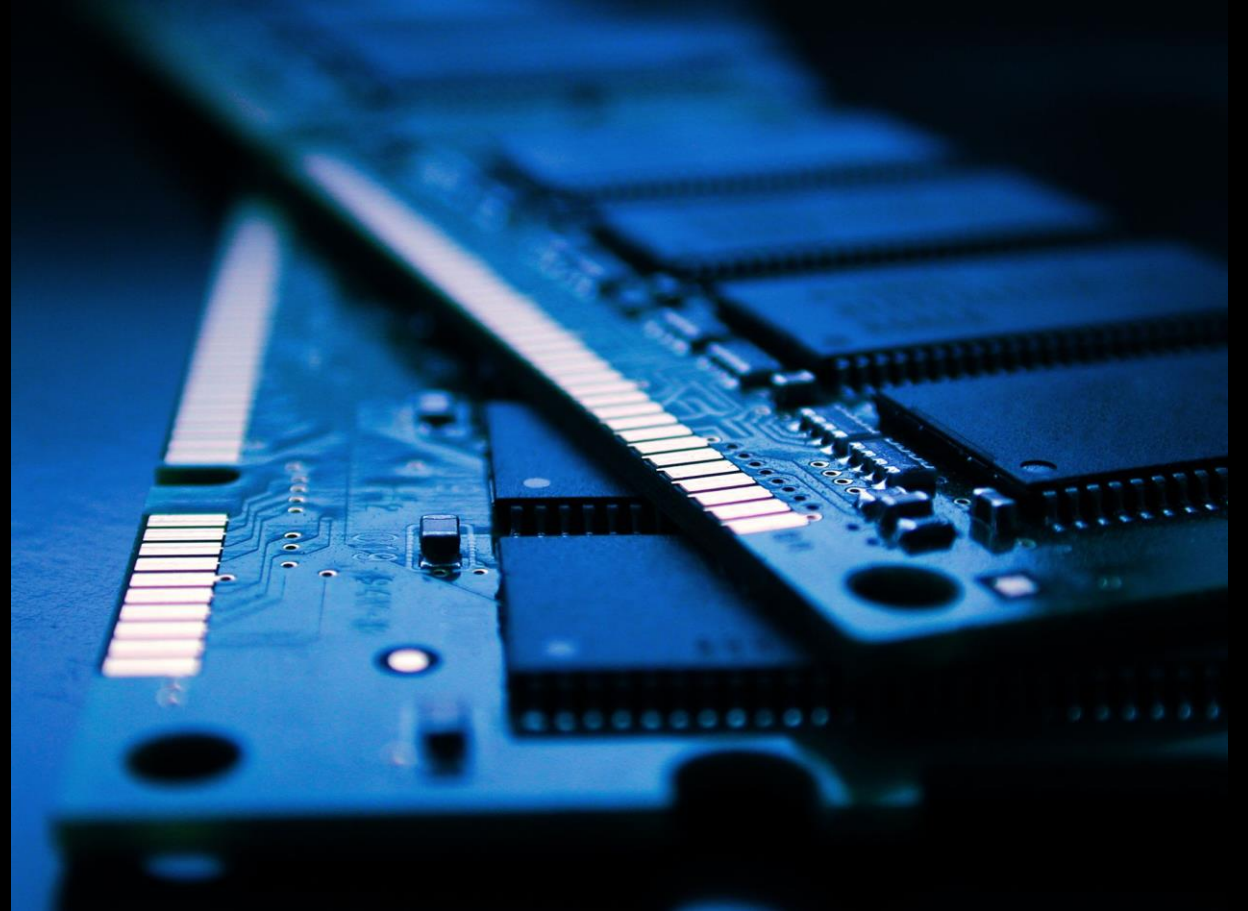


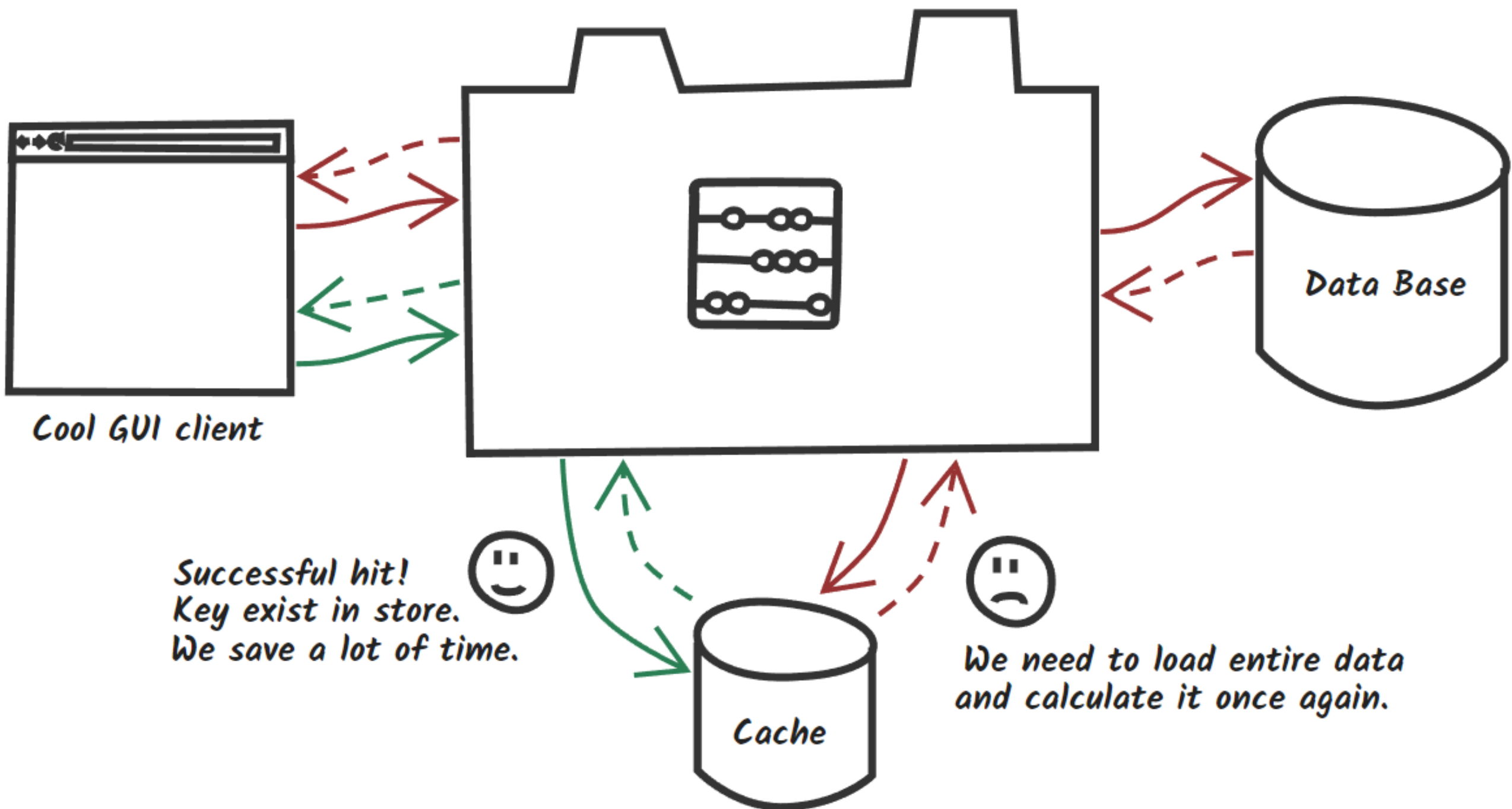


redis



redis







Real time
analytics



High speed
data ingest

Session storage



Application job
management



High speed
transactions



Message queues

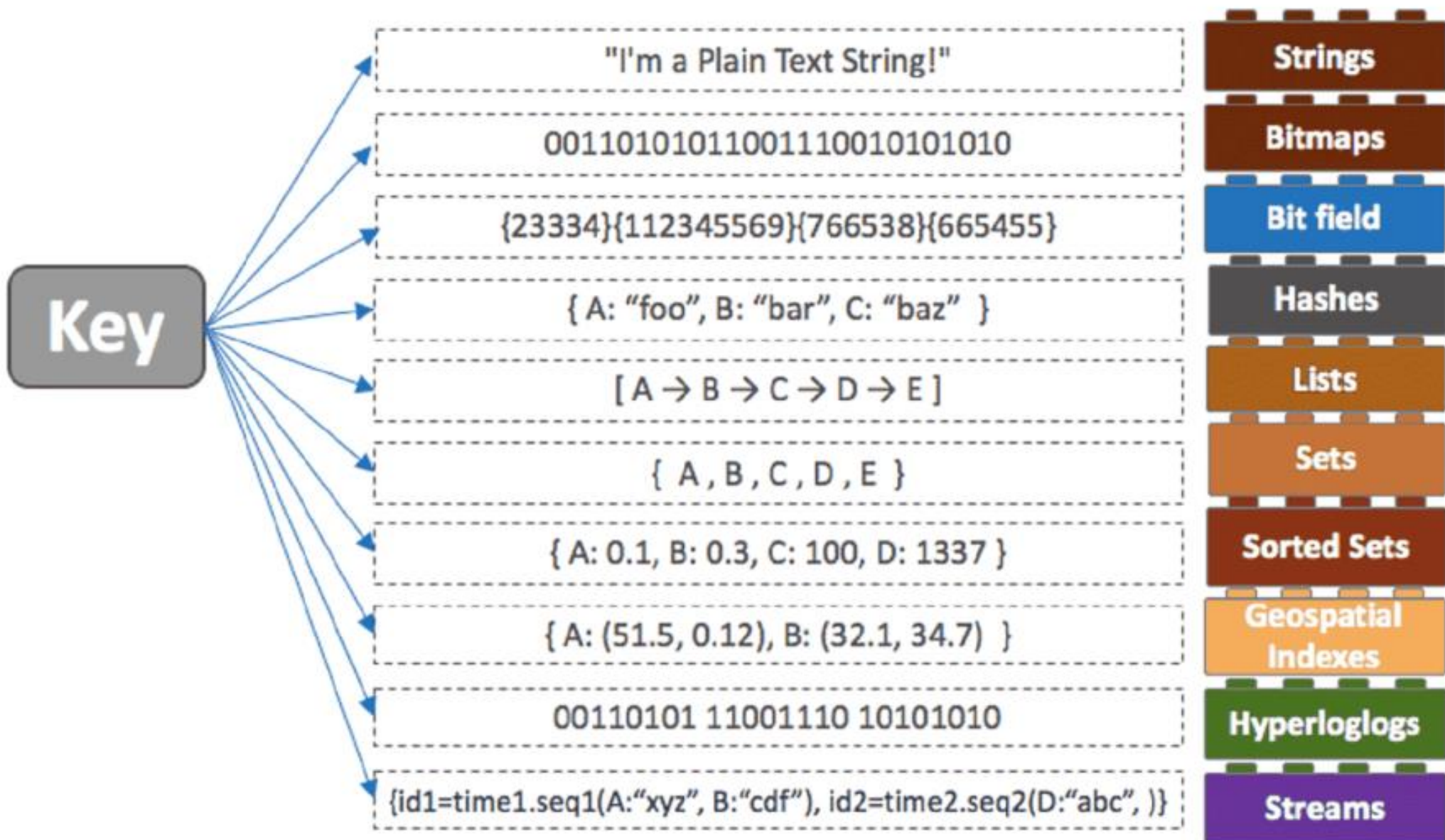


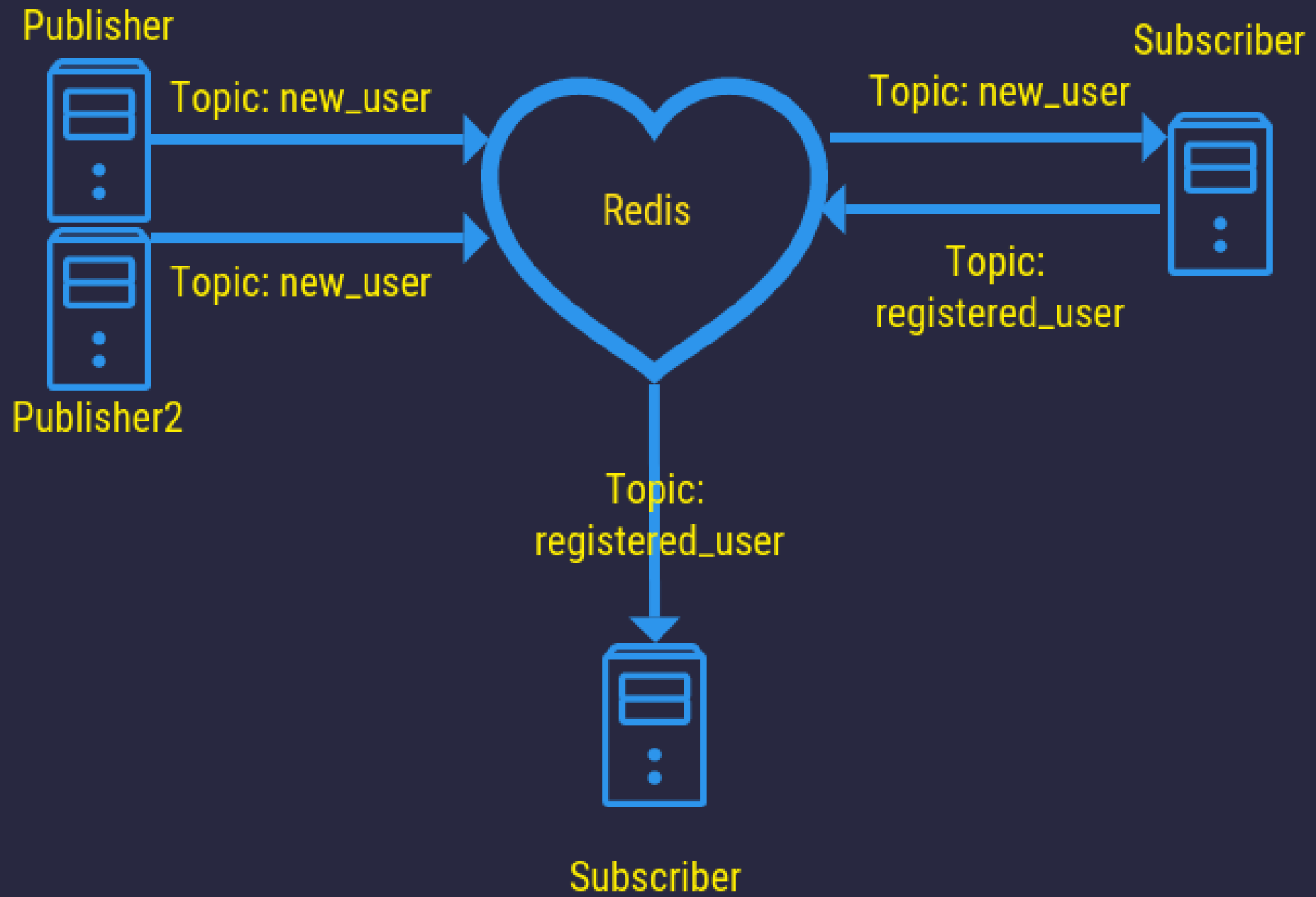
In-app social
functionality

Geo Search
and Caching



redis







EJEMPLO PRÁCTICO

UTILIZANDO REDIS