

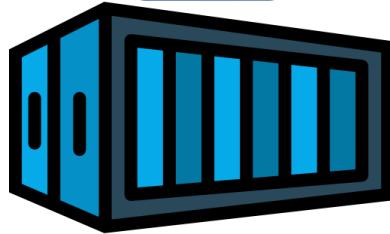
Kubernetes Dans La Vraie Vie



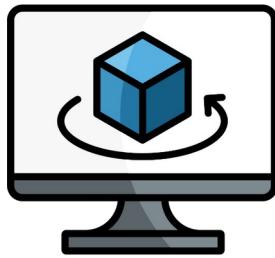
Rappelez moi de démarrer le cluster



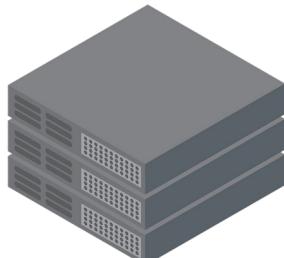
Kubernetes



Containers



Machine Virtuelle

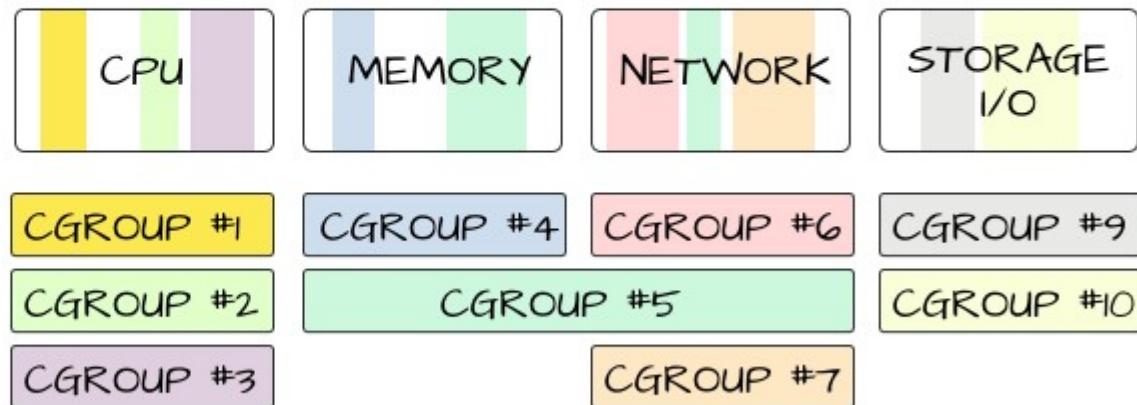


Bare Metal

Docker Grounds up: Resource Isolation

Cgroups : Isolation and accounting

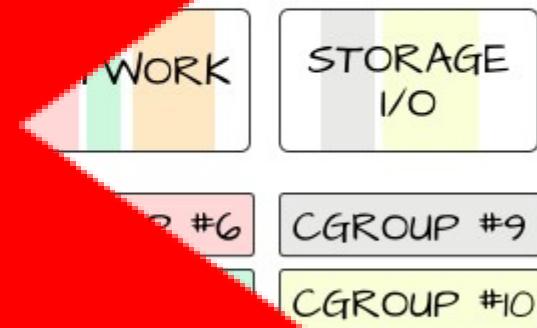
- cpu
- memory
- block i/o
- devices
- network
- numa
- freezer



Cgroups .

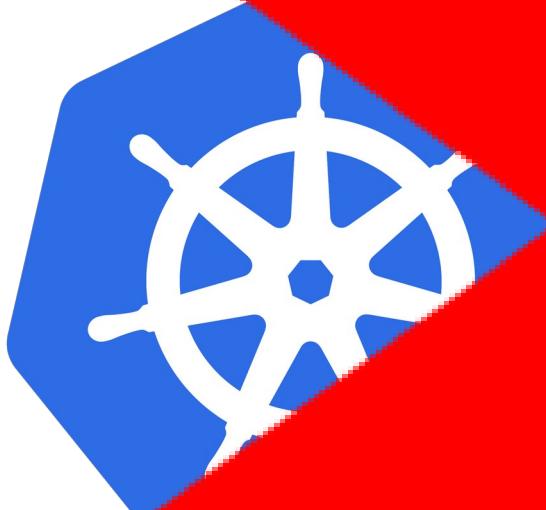
- cpu
- memory
- block i/o
- devices
- network
- numactl
- ...

ends up: Resourc





- Kube API Server
- ETCD
- Kube Scheduler
- Kube Controller Manager
- Kubelet
- Kube Proxy



Kube
- Kube

er
duler
or Manager

Déclaratif
et
Idempotent

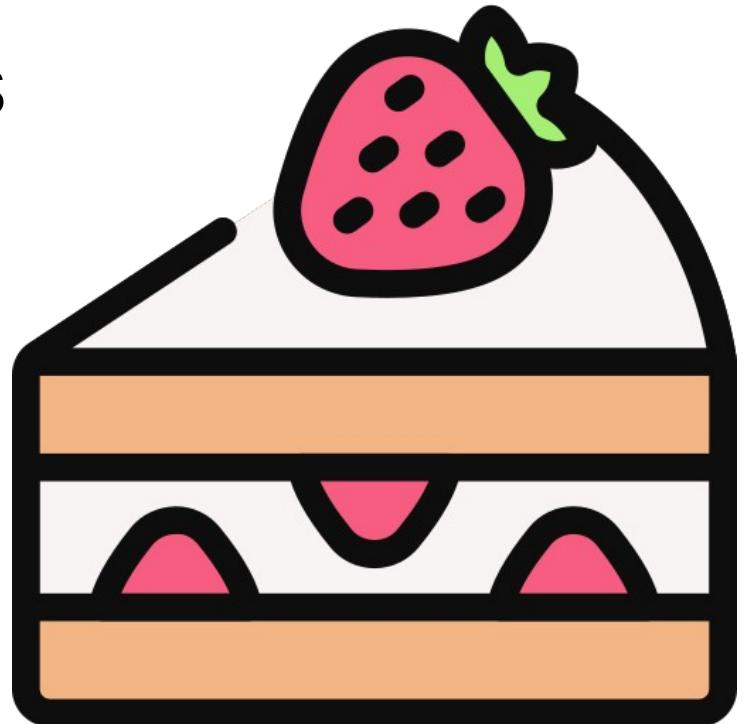
Impératif

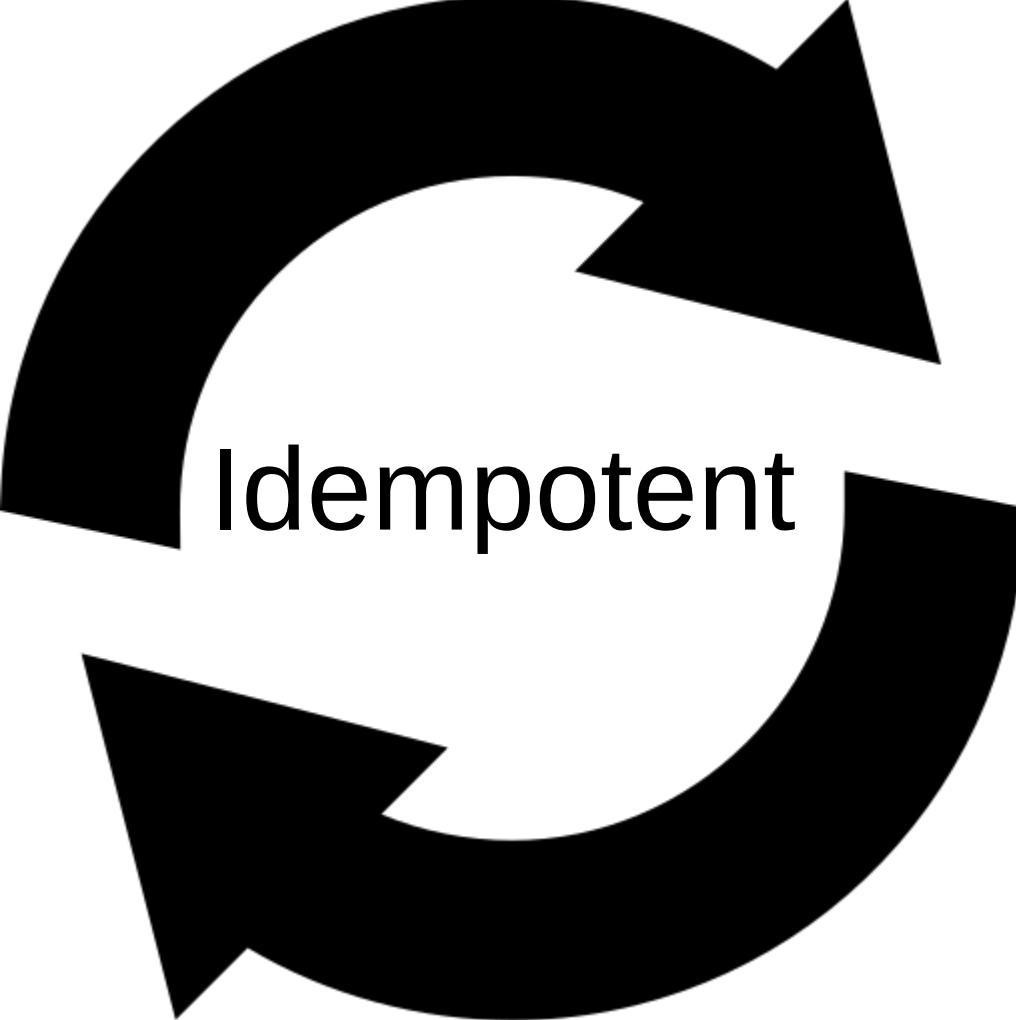
- Peser les ingrédients
- Mélanger les ingrédients
- Ajouter les fraises
- Cuisson du gâteau



Déclaratif

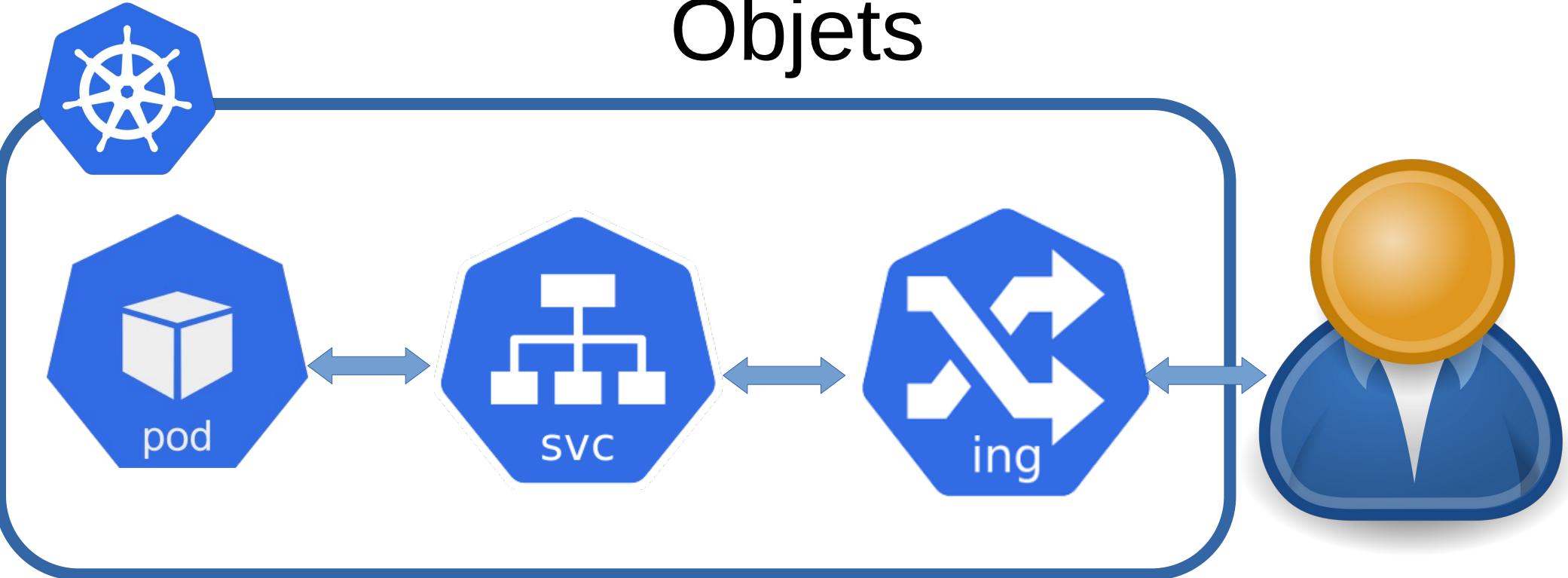
- Je veux 1 gâteau aux fraises





Idempotent

Objets



Manifestes

```
apiVersion: v1
kind: Pod
metadata:
  name: nginx-pod
  namespace: kube-dlvv
spec:
  containers:
    - name: nginx
      image: nginx
      ports:
        - containerPort: 80
```

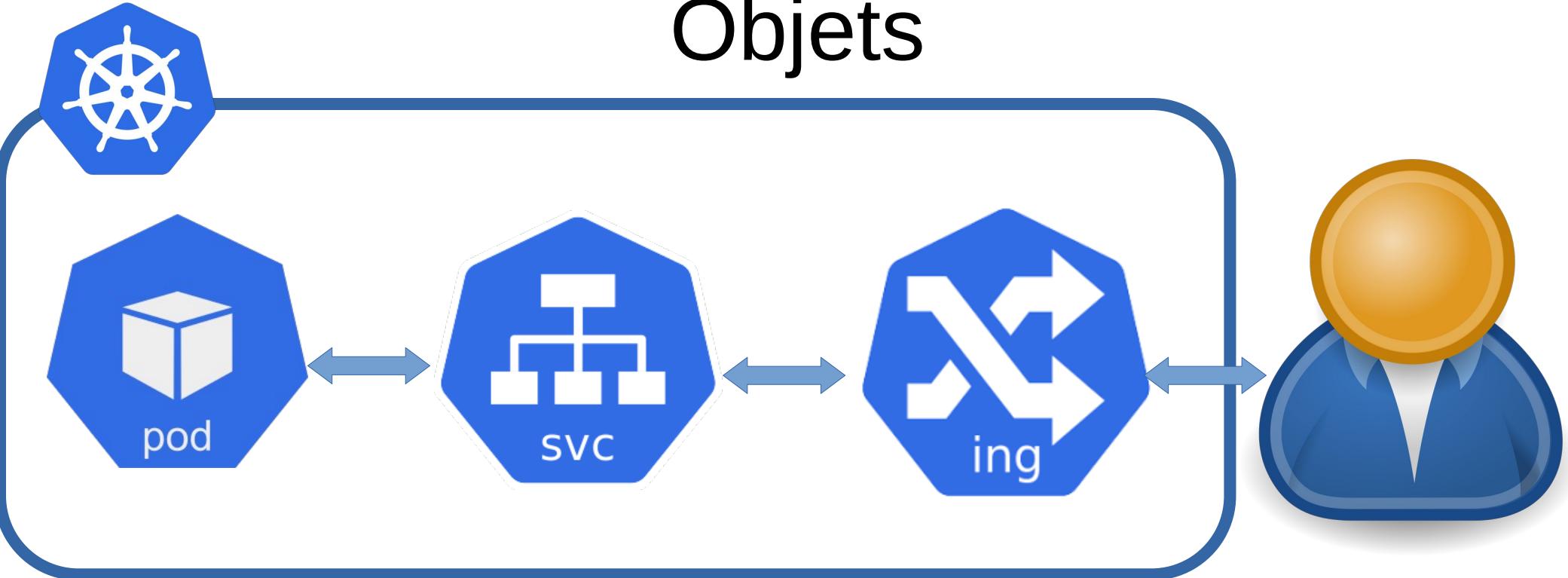
Atelier

À Retenir

Ce sont vos briques élémentaires :

- Déploiements
- Services
- Ingress
- Configmaps

Objets



À Retenir

Verbes Kubectl :

- Get
- Apply
- Delete
- Describe
- Exec

Aller + loin

- Autres objets : Statefulsets, Volumes, Secrets
- Templatisation et Packaging : Helm
- Extensibilité : Opérateurs et Custom Resource Definitions