

Namespaces

- Namespaces allow you to create **virtual clusters** within the same physical cluster
- Namespaces **logically separates** your cluster
- The standard namespace is called “**default**” and that’s where all resources are launched in by default
 - There is also namespace for kubernetes specific resources, called **kube-system**
- Namespaces are intended when you have **multiple teams / projects** using the Kubernetes cluster



Namespaces

- The name of resources need to be unique within a namespace, but not across namespaces
 - e.g. you can have the deployment “helloworld” multiple times in different namespaces, but not twice in one namespace
- You can divide resources of a Kubernetes cluster using namespaces
 - You can limit resources on a per namespace basis
 - e.g. the marketing team can only use a maximum of 10 GiB of memory, 2 loadbalancers, 2 CPU cores



Namespaces

- First you need to create a new namespace

```
$ kubectl create namespace myspace
```

- You can list namespaces:

```
$ kubectl get namespaces
NAME          LABELS    STATUS
default       <none>    Active
kube-system   <none>    Active
myspace       <none>    Active
```

- You can set a default namespace to launch resources in:

```
$ export CONTEXT=$(kubectl config view | awk '/current-context/ {print $2}')
$ kubectl config set-context $CONTEXT --namespace=myspace
```



Demo Placeholder

- Namespace



