# kubectl Kubernetes CLI

## CONCEPTS

Check the context and namespace before changing anything: the same command hits whichever cluster is current.

## CONTEXT

**kubectl config get-contexts**
List contexts

**kubectl config current-context**
Show active context

**kubectl config use-context** *<ctx>*
Switch context

**kubectl config set-context --current --namespace=***<ns>*
Set default namespace

**kubectl explain** *<resource>***.spec**
Show field docs

## CREATE & APPLY

**kubectl apply -f** *<file>*
Create or update from file

**kubectl create deployment** *<name>* **--image=***<img>*
New deployment

**kubectl run** *<name>* **--image=***<img>*
Start a single pod

**kubectl run** *<name>* **--image=***<img>* **--dry-run=client -o yaml**
Generate YAML only

## INSPECT

**kubectl get pods**
List pods

**kubectl get pods -o wide**
Add node and IP

**kubectl get pods -n** *<ns>*
List in a namespace

**kubectl get** *<type>* *<name>* **-o yaml**
Full object as YAML

## INSPECT (cont.)

**kubectl describe** *<type>* *<name>*
Details and recent events

**kubectl get pods -l** *<key>*=*<value>*
Filter by label

**kubectl get events --sort-by=.metadata.creationTimestamp**
Events by time

## PODS & DEBUG

**kubectl logs** *<pod>*
Show pod logs

**kubectl logs -f** *<pod>*
Follow logs

**kubectl logs** *<pod>* **-c** *<container>*
Logs of one container

**kubectl logs** *<pod>* **--previous**
Logs of crashed container

**kubectl exec -it** *<pod>* **-- sh**
Interactive shell

**kubectl port-forward** *<pod>* *<local>*:*<remote>*
Forward a local port

## UPDATE & ROLLOUT

**kubectl set image deployment/***<name>* *<container>*=*<img>*
Change an image

**kubectl rollout undo deployment/***<name>*
Roll back

**kubectl scale deployment/***<name>* **--replicas=***<n>*
Set replica count

## DELETE

**kubectl delete -f** *<file>*
Delete objects from file

**kubectl delete pod** *<pod>*
Delete a pod