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 api-resources
List resource types

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

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

INSPECT (cont.)

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 status deployment/*<name>*
Wait for rollout

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

kubectl rollout restart deployment/*<name>*
Restart all pods

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

kubectl edit *<type>* *<name>*
Edit in $EDITOR

DELETE

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

kubectl delete pod *<pod>*
Delete a pod