

Kubernetes

Here are 13 of the most commonly used kubectl commands for managing a real production Kubernetes environment, along with explanations and common use cases:

□ `kubectl get` `get`

#1 `kubectl get pods` `get pods`

- `kubectl get pods` (list pods)
- `kubectl get deployments` (list deployments)
- `kubectl get services` (list services)
- `kubectl get all` (list most resources in a namespace)

#2 `kubectl describe pod my-pod` `describe pod my-pod`

- `kubectl describe pod my-pod`
- `kubectl describe node my-node`

#3 `kubectl create -f my-deployment.yaml` `create -f my-deployment.yaml`

- `kubectl create -f my-deployment.yaml`

#4 `kubectl apply -f my-deployment.yaml` `apply -f my-deployment.yaml`

- `kubectl apply -f my-deployment.yaml` (apply a deployment definition)

#5 `kubectl delete pod my-pod` `delete pod my-pod`

- `kubectl delete pod my-pod`
- `kubectl delete service my-service`

□ Debugging and Troubleshooting

#6 `kubectl logs my-pod` `logs my-pod`

- `kubectl logs my-pod`
- `kubectl logs my-pod -c my-container` (specify a container)

#7 `kubectl exec -it my-pod -- bash` `exec -it my-pod -- bash`

- `kubectl exec -it my-pod -- bash` (interactive shell)

#8 `kubectl port-forward my-pod 8080:80` `port-forward my-pod 8080:80`

- `kubectl port-forward my-pod 8080:80`

#9 `kubectl top pod` `top pod`

- `kubectl top pod` (pod resource usage)
- `kubectl top node` (node resource usage)

#10

→ kubectl explain pod

→ kubectl explain pod.spec (more specific)

Managing Workloads

#11

→ kubectl rollout status deployment/my-deployment

→ kubectl rollout undo deployment/my-deployment

#12

→ kubectl scale deployment/my-deployment --replicas=5

#13

→ kubectl edit deployment my-deployment

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