

# Kubernetes Cheatsheet



# Kubernetes

## Namespaces

```
# To list all namespaces
kubectl get namespaces or kubectl get ns

# To create namespaces
kubectl create ns namespace_name

# To describe namespaces
kubectl describe ns namespace_name

# To delete namespaces
kubectl delete ns namespace_name
```

## Pods

```
# To list all pods in the current namespace
kubectl get pods

# To list all pods in a specific namespace
kubectl get pods -n namespace_name

# To list all pods in all namespaces
kubectl get pods -A or kubectl get pods --all-namespaces

# To list pods with associated labels
kubectl get pods --show-labels

# To delete a pod
kubectl delete pods pod_name

# To describe a pod
kubectl describe pods pod_name

# To retrieve yaml file for pod
kubectl get pods pod_name -o yaml

# To see the log of a pod
kubectl logs pod_name

# To stream the logs output of a pod with --follow or -f
kubectl logs -f pod_name

# To login inside a running pod
kubectl exec -it pod_name /bin/sh
```

## Replicasets

```
# To list all replicasets in the current namespace
kubectl get replicasets or kubectl get rs

# To list all replicasets in a specific namespace
kubectl get rs -n namespace_name

# To list all replica sets in all namespaces
kubectl get rs -A or kubectl get rs --all-namespaces

# To list replicasets with associated labels
kubectl get rs --show-labels

# To describe a replicasets
kubectl describe rs replicaset_name

# To delete a replicasets
kubectl delete rs replicaset_name

# To retrieve yaml file for replicasets
kubectl get rs replicaset_name -o yaml

# To scale replicas to 3 in a replicaset
kubectl scale rs --replicas=3 replicaset_name
```



## Deployments

```
# To list all deployments in the current namespace
kubectl get deployment or kubectl get deploy

# To list all deployments in a specific namespace
kubectl get deploy -n namespace

# To list all deployments in all namespace
kubectl get deploy -A or kubectl get deploy --all-namespaces

# To list all deployments with labels
kubectl get deploy --show-labels

# To describe a deployment
kubectl describe deploy deployment_name

# To delete a deployment
kubectl delete deploy deployment_name

# To retrieve yaml file for deployment
kubectl get deploy deployment_name -o yaml

# To scale replicas to 3 for a deployment
kubectl scale deployment deployment_name --replicas=3
```

## Rolling Updates & Rollback

```
# Rolling update of "www" containers of your deployment, updating the image
kubectl set image deployment deployment_name www=image:v2

# Check the history of deployments including the revision
kubectl rollout history deployment deployment_name

# Check the status of the deployment rollout
kubectl rollout status deployment deployment_name

# Rollback to the previous deployment
kubectl rollout undo deployment deployment_name

# Rollback to a specific revision
kubectl rollout undo deployment deployment_name --to-revision=2

# Watch rolling update status of deployment until completion
kubectl rollout status -w deployment deployment_name
```

## Services

```
# Exposing deployment with the help of a service
kubectl expose deployment deployment_name --port=service_port --
target-port=container_port --name=service_name --type=service_type

# To list the service
kubectl get services or kubectl get svc

# To describe the service
kubectl describe service service_name

# To delete the service
kubectl delete service service_name
```





## # “thinknyxapp.yml” YAML file to create a Deployment

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: thinknyxdep
spec:
  template:
    metadata:
      name: thinknyxpod
# Defining Labels for Pods
    labels:
      env: prod
    spec:
      containers:
        - name: thinknyxcontainer
          image: yogeshraheja/yogeshk8stest:latest
# Defining number of replicas
replicas: 3
# Defining Selector to be matched for defined Labels
selector:
  matchLabels:
    env: prod
```

# Command to create deployment from yaml file  
kubectl create -f thinknyxapp.yml

You can see the output below:

```
C:\Users\Thinknyx>kubectl get deployment
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
thinknyxdep         3/3     3             3           31s

C:\Users\Thinknyx>kubectl get replicaset
NAME                DESIRED   CURRENT   READY   AGE
thinknyxdep-f88bdcf5c  3         3         3       40s

C:\Users\Thinknyx>kubectl get pods
NAME                READY   STATUS    RESTARTS   AGE
thinknyxdep-f88bdcf5c-4mxfd  1/1     Running   0          44s
thinknyxdep-f88bdcf5c-6c9td  1/1     Running   0          44s
thinknyxdep-f88bdcf5c-hhnpd  1/1     Running   0          44s
```



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