

Kubernetes Cheatsheet

Creating Objects:-

| Name | Command |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Create resource | <code>kubectl apply -f ./<file_name>.yaml</code> |
| Create from multiple files | <code>kubectl apply -f ./<file_name_1>.yaml -f ./<file_name_2>.yaml</code> |
| Create all files in directory | <code>kubectl apply -f ./<directory_name></code> |
| Create from url | <code>kubectl apply -f https://<url></code> |
| Create pod | <code>kubectl run <pod_name> --image <image_name></code> |
| Create pod, then expose it as service | <code>kubectl run <pod_name> --image <image_name> --port <port> --expose</code> |
| Create pod yaml file | <code>kubectl run <pod_name> --image image_name --dry-run=client -o yaml > <file_name>.yaml</code> |
| Create deployment | <code>kubectl create deployment <deployment_name> --image <image_name></code> |
| Create deployment yaml file | <code>kubectl create deployment <deployment_name> --image <image_name> --dry-run=client -o yaml > <file_name>.yaml</code> |
| Create service | <code>kubectl create service <service-type> <service_name> --tcp=<port:target_port></code> |
| Create service yaml file | <code>kubectl create service <service-type> <service_name> --tcp=<port:target_port> --dry-run=client -o yaml > <file_name>.yaml</code> |
| Expose service from pod/deployment | <code>kubectl expose deployment <pod/deployment_name> --type=<service-type> --port <port> --target-port <target_port></code> |
| Create config map from key-value | <code>kubectl create configmap <configmap_name> --from-literal=<key>:<value> --from-literal=<key>:<value></code> |
| Create config map from file | <code>kubectl create configmap <configmap_name> --from-file=<file_name></code> |
| Create config map from env file | <code>kubectl create configmap <configmap_name> --from-env-file=<file_name></code> |
| Create secret from key-value | <code>kubectl create secret generic <secret_name> --from-literal=<key>:<value> --from-literal=<key>:<value></code> |
| Create secret from file | <code>kubectl create secret generic <secret_name> --from-file=<file_name></code> |

| Name | Command |
|-------------------------|-------------------------------------------------------------------------------------------------|
| Create job | kubectrl create job <job_name> --image=<image_name> |
| Create job from cronjob | kubectrl create job <job_name> -- from=cronjob/<cronjob-name> |
| Create cronjob | kubectrl create cronjob --image=<image_name> -- schedule='<cron-syntax>' -- <command> <args> |

Monitoring Usage Commands:-

| Name | Command |
|-------------------------------------|-------------------------------|
| Get node cpu and memory utilization | kubectrl top node <node_name> |
| Get pod cpu and memory utilization | kubectrl top pods <pod_name> |

Node Commands:-

| Name | Command |
|------------------|---------------------------------------|
| Describe node | kubectrl describe node <node_name> |
| Get node in yaml | kubectrl get node <node_name> -o yaml |
| Get node | kubectrl get node <node_name> |
| Drain node | kubectrl drain node <node_name> |
| Cordon node | kubectrl cordon node <node_name> |
| Uncordon node | kubectrl uncordon node <node_name> |

Pod Commands:-

| Name | Command |
|--------------------------|-------------------------------------|
| Get pod | kubectrl get pod <pod_name> |
| Get pod in yaml | kubectrl get pod <pod_name> -o yaml |
| Get pod wide information | kubectrl get pod <pod_name> -o wide |
| Get pod with watch | kubectrl get pod <pod_name> -w |
| Edit pod | kubectrl edit pod <pod_name> |
| Describe pod | kubectrl describe pod <pod_name> |
| Delete pod | kubectrl delete pod <pod_name> |
| Log pod | kubectrl logs pod <pod_name> |
| Tail -f pod | kubectrl logs pod -f <pod_name> |

| Name | Command |
|-------------------------|------------------------------------------------------------------------------------------------|
| Execute into pod | kubectrl exec -it pod <pod_name> /bin/bash |
| Running Temporary Image | kubectrl run <pod_name> --image=curlimages/curl --rm -it --restart=Never -- curl <destination> |

Deployment Commands:-

| Name | Command |
|---------------------------------|-----------------------------------------------------------------------------------|
| Get deployment | kubectrl get deployment <deployment_name> |
| Get deployment in yaml | kubectrl get deployment <deployment_name> -o yaml |
| Get deployment wide information | kubectrl get deployment <deployment_name> -o wide |
| Edit deployment | kubectrl edit deployment <deployment_name> |
| Describe deployment | kubectrl describe deployment <deployment_name> |
| Delete deployment | kubectrl delete deployment <deployment_name> |
| Log deployment | kubectrl logs deployment/deployment_name -f |
| Update image | kubectrl set image deployment <deployment_name> <container_name>=<new_image_name> |
| Scale deployment with replicas | kubectrl scale deployment <deployment_name> --replicas <replicas> |

Service Commands:-

| Name | Command |
|------------------------------|----------------------------------------|
| Get service | kubectrl get service <service> |
| Get service in yaml | kubectrl get service <service> -o yaml |
| Get service wide information | kubectrl get service <service> -o wide |
| Edit service | kubectrl edit service <service> |
| Describe service | kubectrl describe service <service> |
| Delete service | kubectrl delete service <service> |

Endpoints Commands:-

| Name | Command |
|---------------|-----------------------------------------|
| Get endpoints | kubectrl get endpoints <endpoints_name> |

Ingress Commands:-

| Name | Command |
|------------------------------|-----------------------------------------|
| Get ingress | kubectl get ingress |
| Get ingress in yaml | kubectl get ingress -o yaml |
| Get ingress wide information | kubectl get ingress -o wide |
| Edit ingress | kubectl edit ingress <ingress_name> |
| Describe ingress | kubectl describe ingress <ingress_name> |
| Delete ingress | kubectl delete ingress <ingress_name> |

DaemonSet Commands:-

| Name | Command |
|-----------------------|------------------------------------------------|
| Get daemonset | kubectl get daemonset <daemonset_name> |
| Get daemonset in yaml | kubectl get daemonset <daemonset_name> -o yaml |
| Edit daemonset | kubectl edit daemonset <daemonset_name> |
| Describe daemonset | kubectl describe daemonset <daemonset_name> |
| Delete daemonset | kubectl delete deployment <daemonset_name> |

StatefulSet Commands:-

| Name | Command |
|-------------------------|----------------------------------------------------|
| Get statefulset | kubectl get statefulset <statefulset_name> |
| Get statefulset in yaml | kubectl get statefulset <statefulset_name> -o yaml |
| Edit statefulset | kubectl edit statefulset <statefulset_name> |
| Describe statefulset | kubectl describe statefulset <statefulset_name> |
| Delete statefuleset | kubectl delete statefulset <statefulset_name> |

ConfigMaps Commands:-

| Name | Command |
|-----------------------|------------------------------------------------|
| Get configmap | kubectl get configmap <configmap_name> |
| Get configmap in yaml | kubectl get configmap <configmap_name> -o yaml |
| Edit configmap | kubectl edit configmap <configmap_name> |
| Describe configmap | kubectl describe configmap <configmap_name> |
| Delete configmap | kubectl delete configmap <configmap_name> |

Secret Commands:-

| Name | Command |
|--------------------|------------------------------------------|
| Get secret | kubectl get secret <secret_name> |
| Get secret in yaml | kubectl get secret <secret_name> -o yaml |
| Edit secret | kubectl edit secret <secret_name> |
| Describe secret | kubectl describe secret <secret_name> |
| Delete secret | kubectl delete secret <secret_name> |

Rollout Commands:-

| Name | Command |
|------------------------------------------|-----------------------------------------------------------------------------------|
| Restart deployment | kubectl rollout restart deployment <deployment_name> |
| Undo deployment with the latest revision | kubectl rollout undo deployment <deployment_name> |
| Undo deployment with specified revision | kubectl rollout undo deployment <deployment_name> --to-revision <revision_number> |
| Get all revisions of deployment | kubectl rollout history deployment <deployment_name> |
| Get specified revision of deployment | kubectl rollout history deployment <deployment_name> --revision=<revision_number> |

Job Commands:-

| Name | Command |
|------------------|------------------------------------|
| Get job | kubectl get job <job_name> |
| Get job in yaml | kubectl get job <job_name> -o yaml |
| Edit job in yaml | kubectl edit job <job_name> |
| Describe job | kubectl describe job <job_name> |
| Delete job | kubectl delete job <job_name> |

Cronjob Commands:-

| Name | Command |
|---------------------|--------------------------------------------|
| Get cronjob | kubectl get cronjob cronjob_name |
| Get cronjob in yaml | kubectl get cronjob <cronjob_name> -o yaml |

| Name | Command |
|------------------|------------------------------------------|
| Edit cronjob | kubectrl edit cronjob <cronjob_name> |
| Describe cronjob | kubectrl describe cronjob <cronjob_name> |
| Delete cronjob | kubectrl delete cronjob <cronjob_name> |

Network Policy Commands:-

| Name | Command |
|------------------------------------|---------------------------------------------------------|
| Get networkpolicy | kubectrl get networkpolicy <networkpolicy_name> |
| Get networkpolicy in yaml | kubectrl get networkpolicy <networkpolicy_name> -o yaml |
| Get networkpolicy wide information | kubectrl get networkpolicy <networkpolicy_name> -o wide |
| Edit networkpolicy | kubectrl edit networkpolicy <networkpolicy_name> |
| Describe networkpolicy | kubectrl describe networkpolicy <networkpolicy_name> |
| Delete networkpolicy | kubectrl delete networkpolicy <networkpolicy_name> |

Labels and Selectors Commands:-

| Name | Command |
|------------------------------------------------|---------------------------------------------------------------|
| Show labels of node,pod and deployment | kubectrl get <node/pod/deployment> --show-labels |
| Attach labels to <node/pod/deployment> | kubectrl label <node/pod/deployment> <pod_name> <key>=<value> |
| Remove labels from <node/pod/deployment> | kubectrl label <node/pod/deployment> <pod_name> <key>- |
| Select node,pod and deployment by using labels | kubectrl get <node/pod/deployment> -l <key>=<value> |