

Kubernetes Commands & Usage

1. Basic Cluster Information

- **Kubectl Cluster-info**: Display information about the cluster.
- **Kubectl version**: Display version info

2. Working with Pods:

- **Kubectl get pods**: List all pods in all namespaces.
- **Kubectl run <name> --image=<image>**: Deploy a new pod with a given image.
- **Kubectl describe pod <pod-name>**: Describe a specific pod.
- **Kubectl logs <pod-name>**: Fetch the logs from a pod.
- **Kubectl delete pod <pod-name>**: Delete a specific pod.

3. Working with Nodes and Cluster:

- **Kubectl get Nodes**: List nodes in a Cluster.
- **Kubectl describe node <node-name>**: show details of a specific node.

4. Working with Deployments:

- **Kubectl Create deployment <name> --image=<image>**: Create a new deployment.
- **Kubectl get deployment**: list all deployment.
- **Kubectl describe deployment <deployment-Name>**: Describe a specific deployment.
- **Kubectl scale deployment <deployment-Name> --replicas=<num>**: scale up/down a deployment.

5. Working with Services:

- `Kubectl expose deployment <name> --type =Load balancer --port=8080:` Expose a Deployment as a service.
- `Kubectl get services:` List all service.
- `Kubectl describe service <service -name>:` Describe a specific service.

6. Config and Storage:

- `Kubectl get Configmaps:` List all Config maps.
- `Kubectl Create Configmap <name> --from -file=<path>:` Create a config map from a file.
- `Kubectl get Secrets:` List all secrets.
- `Kubectl create secrets:` Create a secrets.
- `Kubectl get pv:` list all persistent volumes.
- `Kubectl get pvc:` List all persistent volume claims.

7. Namespaces and Context:

- `Kubectl get Namespaces:` list all Namespaces.
- `Kubectl Config get-contexts:` show all contexts.
- `Kubectl Config use-context <context-name>:` Switch to a different context.

8. Monitoring & Logging:

- `Kubectl top nodes:` Display resource (Cpu/Memory/Storage) usage of nodes.
- `Kubectl top pods:` Display resource (Cpu/Memory/Storage) Usage of pods.

9. Working with Helm:

- `Helm list:` list release.
- `Helm install < chart >:` Install a helm chart.
- `Helm uninstall < release -name>:` uninstall a helm release.