Basic Commands:

- **List clusters**: `kubectl config get-clusters`
- **Get cluster info**: `kubectl cluster-info`
- **Set current context**: `kubectl config use-context <context-name>`
- **Set default namespace**: `kubectl config set-context $(kubectl config current-context) --namespace=<namespace>`
- **Get Credentials:** `az aks get-credentials --resource-group <resource-group> --name <cluster-name>`
-

Cluster Operations:

- **Create cluster**: `az aks create --resource-group <resource-group> --name <cluster-name> --node-count <number-of-nodes>`
- **Get cluster info**: `az aks show --resource-group <resource-group> --name <cluster-name>`
- **List Clusters :** `az aks list --output table`
- **Set Context:** `kubectl config use-context <cluster-name>`
- **Cluster Events:** `kubectl get events`

- **Upgrade Cluster :** `az aks upgrade --resource-group <resource-group> --name <cluster-name> --kubernetes-version 1.31.x`
- **Delete Cluster :** az aks delete `--resource-group <resource-group> --name <cluster-name> --yes --no-wait`

Scaling:

- **Scale nodes**: `az aks scale --name <cluster-name> --resource-group <resource-group> --node-count <number-of-nodes>`

Namespace Management:

- **List namespaces**: `kubectl get namespaces`
- **Set namespace**: `kubectl config set-context $(kubectl config current-context) --namespace=<namespace>`

Resource Management:

- **Get all resources**: `kubectl get all`
- **List Namespaces:** `kubectl get namespaces`
- **Get nodes**: `kubectl get nodes`
- **Get pods**: `kubectl get pods`
- **Get services**: `kubectl get svc`
- **Describe Node**: `kubectl describe nodes <node-id>`
- **Describe Pod:** `kubectl describe pod <pod-name> -n <namespace-name>`
- **List Nodepools:** `az aks nodepool list --resource-group <resource-group> --name <cluster-name> -o table`
- **Set Namespace:** `kubectl config set-context $(kubectl config current-context) --namespace=<namespace-name>`

Deployments:

- **Deploy application:**
  - `kubectl apply -f my-config.yaml`
  - `kubectl create deployment <deployment-name> --image=<image-name>`
- **Get Deployments in namespace:** `kubectl get deployments –n <namespace>`
- **Get Deployments from all namespaces:** `kubectl get deployments --all-namespaces`
- **Describe Deployment:** `kubectl describe deployment <deployment-name>`
- **Get Logs from the POD:** `kubectl logs <podname> -n <namespace-name>`
- **Scale a deployment:** `kubectl scale deployment <deployment-name> --replicas=<count>`
- **Describe a specific pod:** `kubectl describe pod <pod-name> -n <namespace-name>`
- **Execute a command in a container:** `kubectl exec <pod-name> -n <namespace-name> -- ls /`
- **Delete a POD:** `kubectl delete pod <pod-name> -n <namespace-name>`

Run a command on the AKS cluster (for private clusters):

- `az aks command invoke --resource-group <resource-group> --name <cluster-name> --command "kubectl get pods -n kube-system"`

Enable add-ons:

- `az aks enable-addons --resource-group <resource-group> --name <cluster-name> --addons monitoring`

Please Note: replace with resource names like <pod-name> with your running pod name

<namespace-name> = <your target namespace name>

I will come up with examples in my next article.

Follow me: Sivaiah Yakkanti

If this article is useful, please comment, share and repost.