

AKS + ACR + Docker + Manifest Full Deployment Guide

1. Create Resource Group

- `az group create --name myResourceGroup --location eastus`

2. Create AKS Cluster with ACR attached

- `az aks create \`
- `--resource-group myResourceGroup \`
- `--name myAKSCluster \`
- `--node-count 2 \`
- `--enable-addons monitoring \`
- `--generate-ssh-keys \`
- `--attach-acr myAcrName`

3. Get AKS Credentials

- `az aks get-credentials --resource-group myResourceGroup --name myAKSCluster`

4. Build and Push Docker Image

- `cd myapp`
- `docker build -t myapp:latest .`
- `docker tag myapp:latest myAcrName.azurecr.io/myapp:latest`
- `docker push myAcrName.azurecr.io/myapp:latest`

5. Create and Apply Kubernetes Manifest

- `# Create deployment.yaml file with Deployment and Service definition`
- `kubectl apply -f deployment.yaml`

6. Check Kubernetes Resources

- `kubectl get deployments`
- `kubectl get pods`
- `kubectl get services`
- `kubectl get nodes`

7. Monitor & Troubleshoot

- `kubectl logs`
- `kubectl describe pod`

8. Clean Up Resources

- `az group delete --name myResourceGroup --yes --no-wait`