



Application Containerization and Orchestration Lab

Experiment 8

AIM: Working with Kubernetes (Single Node Cluster)

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alpha@Akhands-MacBook-Pro bin % cd /Users/alpha/desktop/college/ACOLAB/R2142201498/exp8kubernetes
alpha@Akhands-MacBook-Pro exp8kubernetes % ls
deployment.yml pod.yml replicaset.yml service.yml
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl apply -f pod.yml
pod/my-nginx-pod1 created
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl apply -f service.yml
service/my-nginx-service1 created
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl apply -f replicaset.yml
replicaset.apps/nginx-rs created
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl apply -f deployment.yml
deployment.apps/apache-deployment created
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl get all
NAME                                READY    STATUS              RESTARTS   AGE
pod/apache-deployment-8f458dc5b-6ccf6 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-75zts 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-7xvlz 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-fk8vz 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-k9wfh 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-mdj27 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-rw5dp 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-t56l5 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-vt9gl 0/1      ContainerCreating   0           9s
pod/apache-deployment-8f458dc5b-zb8x6 0/1      ContainerCreating   0           9s
pod/my-nginx-pod1                      1/1      Running             0           2m2s
pod/nginx-rs-9nq6v                    0/1      ContainerCreating   0           19s
pod/nginx-rs-qhfzc                    0/1      ContainerCreating   0           19s
pod/nginx-rs-qrpjv                    0/1      ContainerCreating   0           19s
pod/nginx-rs-zr9nn                    0/1      ContainerCreating   0           19s

NAME                                TYPE          CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
service/kubernetes                  ClusterIP     10.96.0.1     <none>         443/TCP          4m33s
service/my-nginx-service1          NodePort      10.103.223.45 <none>         80:30005/TCP     36s

NAME                                READY    UP-TO-DATE    AVAILABLE    AGE
deployment.apps/apache-deployment 0/10     10             0            9s

NAME                                DESIRED    CURRENT    READY    AGE
replicaset.apps/apache-deployment-8f458dc5b 10         10         0        9s
replicaset.apps/nginx-rs                    5          5          1        19s
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl delete -f deployment.yml
deployment.apps "apache-deployment" deleted
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl delete -f replicaset.yml
replicaset.apps "nginx-rs" deleted
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl delete -f service.yml
service "my-nginx-service1" deleted
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl delete -f pod.yml
Error from server (NotFound): error when deleting "pod.yml": pods "my-nginx-pod1" not found
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl delete -f pod.yml
Error from server (NotFound): error when deleting "pod.yml": pods "my-nginx-pod1" not found
alpha@Akhands-MacBook-Pro exp8kubernetes % kubectl get all
NAME                                TYPE          CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
service/kubernetes                  ClusterIP     10.96.0.1     <none>         443/TCP          6m39s
alpha@Akhands-MacBook-Pro exp8kubernetes %

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