

Run a Stateless Application Using a Deployment

You need to have a Kubernetes cluster, and the kubectl command-line tool must be configured to communicate with your cluster.

The GoldenAMI has already been configured to communicate the Kubernetes Cluster. You can confirm the same by login into your Instance terminal and running the below command.

```
$ kubectl config view # Show Merged kubeconfig settings.
```

1. Deploy an application (ex. nginx) on the kubernetes cluster

```
$ kubectl run <your-app-name> --replicas=2 --image=nginx:latest --port=80
```

The preceding command creates a Deployment object and an associated ReplicaSet object. The ReplicaSet has Two Pods, each of which runs the **nginx** application.

2. Display information about the Deployment:

```
$ kubectl get deployments <your-app-name>
```

```
$ kubectl describe deployments <your-app-name>
```

3. Display information about your ReplicaSet objects:

```
$ kubectl get replicaset <your-app-name>
```

```
$ kubectl describe replicaset <your-app-name>
```

4. Create a **Service** object that exposes the deployment:

```
$ kubectl expose deployment <your-app-name> --type=LoadBalancer  
--name=<your-service-name>
```

5. Display information about the Service:

```
$ kubectl get services <your-service-name>
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
my-service	LoadBalancer	100.71.126.104	aa8563e35d6af11e8aa57021a64c42e3-1142915350.us-east-2.elb.amazonaws.com	8080:30942/TCP	7s

6. Display detailed information about the Service:

```
$ kubectl describe services <my-service>
```

7. Use the Load-Balancer-endpoint to access the Hello World application:
http://< load-balancer-endpoint >:<port>
8. Login to the dashboard and go to the services to see the load-balancer endpoint. Click on the endpoint to access nginx webpage.

Note : Please wait for 5 minutes once the app is exposed externally before trying to access from the load-balancer (endpoint)

Cleaning up

To delete the Service, enter this command:

```
$ kubectl delete services <service-name>
```

To delete the Deployment, the ReplicaSet, and the Pods that are running the NGINX application, enter this command:

```
$ kubectl delete deployment <app-name>
```