

DEPLOYMENT OF APP IN IBM CLOUD

DEPLOY IN KUBERNETES CLUSTER

Team ID	PNT2022TMID50559
Project Name	CONTAINMENT ZONE ALERTING APPLICATION
Team Members:	P.Amutha , A.Jannath Firthouse, M.Muthuselvi, K.Priya

1. Target the IBM Cloud Kubernetes Service region where you want to work.

```
ibmcloud cs region-set us-south
```

2. Set the context for the cluster in your CLI.

a. Get the command to set the environment variable and download the Kubernetes configuration files.

```
ibmcloud cs cluster-config cluster_kunal
```

b. Set the KUBECONFIG environment variable. Copy the output from the previous command and paste it in your terminal. The command output should look similar to the following.

```
> export KUBECONFIG=/Users/$USER/.bluemix/plugins/container-service/clusters/<cluster_name >/< cluster_configuration_file.yaml>
```

3. Verify that you can connect to your cluster by listing your worker nodes.

```
kubectl get nodes
```

4. Create the deployment.

```
kubectl create -f deployment.yaml
```


```
Kunals-MacBook-Pro:web kunalmalhotra$ kubectl create -f deployment.yaml  
deployment.extensions/flask-node-deployment created
```

5. Create the service.


```
kubectl create -f service.yaml
```

```
Kunals-MacBook-Pro:web kunalmalhotra$ kubectl create -f service.yaml  
service/flask-node-deployment created
```

6. Look at the Kubernetes dashboard from the IBM Kubernetes Service overview page.

 **kubernetes**

Q Search

+ CREATE | 

Overview

Cluster

Namespaces

Nodes

Persistent Volumes

Roles

Storage Classes

Namespace

default

Overview

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Discovery and Load Balancing

Ingresses


Services

Config and Storage




Config Maps

Persistent Volume Claims


Deployments

Name	Labels	Pods	Age	Images
 flask-node-deployment	app: flasknode	1 / 1	5 minutes	registry.ng.bluemix.net/flask-node/app

Pods



Name	Node	Status	Restarts	Age	CPU (cores)	Memory (bytes)
 flask-node-deployment-5cd96cf6bc-d6n6x	10.47.79.201	Running	0	5 minutes	 0	 19.352 Mi

Replica Sets

Name	Labels	Pods	Age	Images
 flask-node-deployment-5cd96cf6bc	app: flasknode pod-template-hash: 1785279267	1 / 1	5 minutes	registry.ng.bluemix.net/flask-node/app

Discovery and Load Balancing

Services

Name	Labels	Cluster IP	Internal endpoints	External endpoints	Age
 kubernetes	component: apiserver provider: kubernetes	172.21.0.1	kubernetes:443 TCP kubernetes:0 TCP	-	a minute
 flask-node-deployment	-	172.21.104.14	flask-node-deployment:5000 TCP flask-node-deployment:0 TCP	-	a minute

Config and Storage

7. Finally, go to your browser and ping the Public IP of your worker node.

