# **Deploy on Kubernetes Cluster**

Date	19 November 2022
Team ID	PNT2022TMID12716
Project Name	Inventory Management System For Retailers

## deployment.yaml:

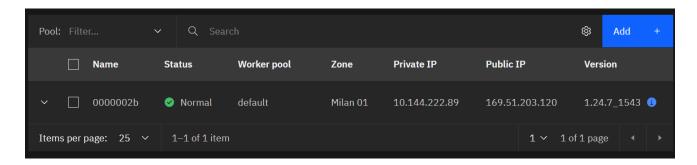
```
deployment.yaml
     apiVersion: apps/v1
     kind: Deployment
     metadata:
      name: inventory-mgmt
     spec:
       replicas: 1
       selector:
         matchLabels:
            app: flasknode
10
       template:
11
         metadata:
12
            labels:
13
              app: flasknode
         spec:
            containers:
            - name: flasknode
              image: us.icr.io/udhayakumaran/inventory_mgmt:1.1
17
              imagePullPolicy: Always
              ports:
20
              - containerPort: 5000
```

Enter *ibmcloud* ks *cluster config -c <cluster\_id>* to connect with the kubernetes cluster created in the IBM Cloud

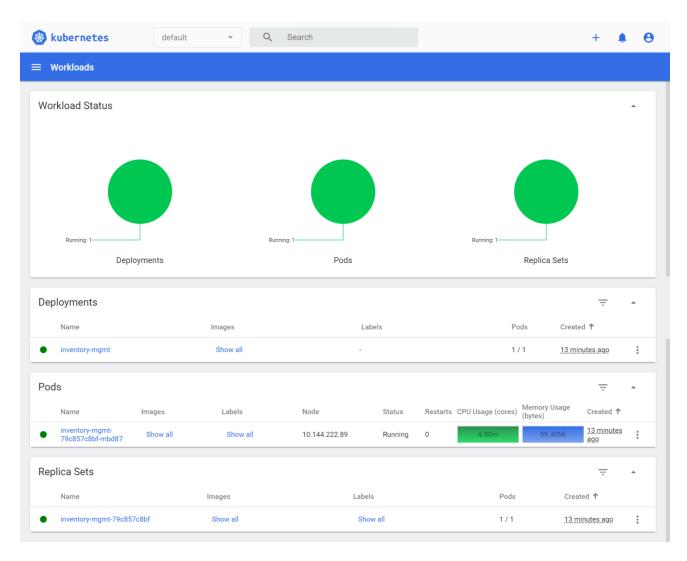
```
(myApp) D:\Inventory_Management_System_for_Retailers>ibmcloud ks cluster config -c
The configuration for cdticv7f05afjutac0hg was downloaded successfully.
Added context for cdticv7f05afjutac0hg to the current kubeconfig file.
You can now execute '<mark>kubectl</mark>' commands against your cluster. For example, run '<mark>kubectl get nodes</mark>'.
If you are accessing the cluster for the first time, 'kubectl' commands might fail for a few seconds while
RBAC synchronizes.
(myApp) D:\Inventory_Management_System_for_Retailers>kubectl create -f deployment.yaml
deployment.apps/inventory-mgmt created
(myApp) D:\Inventory_Management_System_for_Retailers>kubectl get deployment
                 READY
                         UP-TO-DATE
                                       AVAILABLE
                                                    AGE
inventory-mgmt
                                                    38s
                 1/1
```

After deploying, expose the application to public using the command; kubectl expose deployment inventory-mgmt --type=NodePort --name=inventory-mgmt

# **Kubernetes Cluster Worker Node**



#### **Kubernetes Dashboard**



# Application running on IBM Kubernetes Cluster



