

## Deploymnet of App in IBM Cloud Deploy in Kubernetes Cluster

Date	11 November 2022
Team ID	PNT2022TMID26452
Project Name	Personal expense tracker application

### Deploy in Kubernetes Cluster

```

thor@jump_host ~$
thor@jump_host ~$ kubectl get all
NAME                                READY   STATUS              RESTARTS   AGE
pod/python-deployment-nautilus-5dbcd5f8b4-vsljv  0/1     ImagePullBackOff    0           87s

NAME                                TYPE          CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
service/kubernetes                  ClusterIP     10.96.0.1     <none>         443/TCP          35s
service/python-service-nautilus     NodePort      10.96.40.136  <none>         8080:32345/TCP   87s

NAME                                READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/python-deployment-nautilus  0/1     1             0           87s

NAME                                DESIRED   CURRENT   READY   AGE
replicaset.apps/python-deployment-nautilus-5dbcd5f8b4  1         1         0       87s
thor@jump_host ~$
thor@jump_host ~$ kubectl logs python-deployment-nautilus-5dbcd5f8b4-vsljv
Error from server (BadRequest): container "python-container-nautilus" in pod "python-deployment-nautilus-5dbcd5f8b4-vsljv" is waiting to start: image can't be pulled
thor@jump_host ~$
thor@jump_host ~$ kubectl de

```

```

Annotations:      deployment.kubernetes.io/revision: 1
Selector:         app=python_app
Replicas:         1 desired | 1 updated | 1 total | 0 available | 1 unavailable
StrategyType:     RollingUpdate
MinReadySeconds:  0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels:  app=python_app
  Containers:
    python-container-nautilus:
      Image:   poroko/flask-app-demo
      Port:    5000/TCP
      Host Port:  80/TCP
      Environment: <none>
      Mounts:      <none>
      Volumes:     <none>
Conditions:
  Type           Status  Reason
  ----           -
  Available      False   MinimumReplicasUnavailable
  Progressing    True    ReplicaSetUpdated
OldReplicaSets: <none>
NewReplicaSet:  python-deployment-nautilus-5dbcd5f8b4 (1/1 replicas created)
Events:
  Type           Reason             Age    From                      Message
  ----           -
  Normal         ScalingReplicaSet  119s   deployment-controller     Scaled up replica set python-deployment-nautilus-5dbcd5f8b4 to 1
thor@jump_host ~$

```

```
# Please edit the object below. Lines beginning with a '#' will be ignored,
# and an empty file will abort the edit. If an error occurs while saving this file will
# reopened with the relevant failures.
#
apiVersion: apps/v1
kind: Deployment
metadata:
  annotations:
    deployment.kubernetes.io/revision: "1"
    kubectl.kubernetes.io/last-applied-configuration: |
      {"apiVersion":"apps/v1","kind":"Deployment","metadata":{"annotations":{},"name":
      "python-deployment-nautilus","namespace":"default"},"spec":{"replicas":1,"selector":{"matchLabels":{"app":"python_app"},"template":{"metadata":{"labels":{"app":"python_app"},"spec":{"containers":{"name":"python-container-nautilus","image":"poroko/flask-app-demo","name":"python-container-nautilus","ports":[{"containerPort":80}]]]]}}}
creationTimestamp: "2021-09-10T16:02:11Z"
generation: 1
name: python-deployment-nautilus
namespace: default
resourceVersion: "3959"
uid: 177c6c69-ff69-4af5-8f8b-bdcdb55281f1
spec:
  progressDeadlineSeconds: 600
  replicas: 1
  revisionHistoryLimit: 10
  selector:
    matchLabels:
      app: python_app
  strategy:
```

```
creationTimestamp: "2021-09-10T16:02:11Z"
generation: 1
name: python-deployment-nautilus
namespace: default
resourceVersion: "3959"
uid: 177c6c69-ff69-4af5-8f8b-bdcdb55281f1
spec:
  progressDeadlineSeconds: 600
  replicas: 1
  revisionHistoryLimit: 10
  selector:
    matchLabels:
      app: python_app
  strategy:
    rollingUpdate:
      maxSurge: 25%
      maxUnavailable: 25%
    type: RollingUpdate
  template:
    metadata:
      creationTimestamp: null
      labels:
        app: python_app
    spec:
      containers:
        - image: poroko/flask-demo-app
          imagePullPolicy: Always
          name: python-container-nautilus
          ports:
```

```
thor@jump_host ~$ kubectl get deploy
NAME                                READY    UP-TO-DATE    AVAILABLE    AGE
python-deployment-nautilus         1/1      1              1             4m23s
thor@jump_host ~$
thor@jump_host ~$ kubectl get pods
NAME                                READY    STATUS    RESTARTS    AGE
python-deployment-nautilus-767b6d4c9b-znb7m  1/1      Running   0            76s
thor@jump_host ~$
thor@jump_host ~$ kubectl edit svc
service/kubernetes skipped
service/python-service-nautilus edited
thor@jump_host ~$
thor@jump_host ~$ kubectl get svc
NAME                                TYPE        CLUSTER-IP    EXTERNAL-IP    PORT(S)          AGE
kubernetes                         ClusterIP    10.96.0.1     <none>         443/TCP          39m
python-service-nautilus            NodePort     10.96.40.136  <none>         5000:32345/TCP   5m42s
thor@jump_host ~$
```