

Creating Kubernetes Cluster using IBM Cloud Container Registry

```
C:\Windows\System32\cmd.exe
bfc1deb8136e: Mounted from mod-01/ibm-db2-docker
1f123186824c: Mounted from mod-01/ibm-db2-docker
3d6eb1152931: Mounted from mod-01/ibm-db2-docker
100796cdf3b1: Mounted from mod-01/ibm-db2-docker
54acb5a6fa0b: Mounted from mod-01/ibm-db2-docker
8d51c618126f: Mounted from mod-01/ibm-db2-docker
9ff6e4d46744: Mounted from mod-01/ibm-db2-docker
a89d1d47b5a1: Mounted from mod-01/ibm-db2-docker
655ed1b7a428: Mounted from mod-01/ibm-db2-docker
latest: digest: sha256:7e60b8c662fa6836bed998ea2f97a3a31e7ddfb131dd7096a2eecd8288bbf27 size: 3265

C:\Users\kishore kumar\Desktop\Pda>kubectl config get-contexts
CURRENT  NAME      CLUSTER      AUTHINFO      NAMESPACE
*        docker-desktop  docker-desktop  docker-desktop
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/ibm_deployment.yaml
deployment.apps/pda created
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_service.yaml
service/flask-app-service created
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_ingress.yaml
ingress.networking.k8s.io/pda-ingress created
C:\Users\kishore kumar\Desktop\Pda>kubectl get ing
NAME      CLASS  HOSTS      ADDRESS      PORTS      AGE
pda-ingress  <none>  *          *            80         25s
C:\Users\kishore kumar\Desktop\Pda>kubectl get svc
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
flask-app-service  ClusterIP  10.97.238.223    <none>            5000/TCP      2m5s
kubernetes        ClusterIP  10.96.0.1        <none>            443/TCP       38h
C:\Users\kishore kumar\Desktop\Pda>kubectl get nodes -o wide
NAME      STATUS    ROLES      AGE      VERSION    INTERNAL-IP    EXTERNAL-IP    OS-IMAGE      KERNEL-VERSION    CONTAINER-RUNTIME
E
docker-desktop  Ready    control-plane  38h    v1.25.0    192.168.65.4    <none>         Docker Desktop  5.10.16.3-microsoft-standard-WSL2  docker://20.10.17
7
```

```
C:\Windows\System32\cmd.exe
C:\Users\kishore kumar\Desktop\Pda>kubectl describe svc flask-app-service
Name:      flask-app-service
Namespace: default
Labels:    <none>
Annotations: <none>
Selector:  app=pda
Type:      ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP:        10.97.238.223
IPs:       10.97.238.223
Port:      <unset> 5000/TCP
TargetPort: 5000/TCP
Endpoints:  <none>
Session Affinity: None
Events:     <none>
C:\Users\kishore kumar\Desktop\Pda>kubectl describe svc pda
Error from server (NotFound): services "pda" not found
C:\Users\kishore kumar\Desktop\Pda>kubectl run flask-app-service --image=jp.icr.io/pda-01/pda
pod/flask-app-service created
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/ibm_deployment.yaml
deployment.apps/pda unchanged
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_service.yaml
service/flask-app-service unchanged
C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetes/flask_ingress.yaml
ingress.networking.k8s.io/pda-ingress unchanged
C:\Users\kishore kumar\Desktop\Pda>kubectl get nodes -o wide
NAME      STATUS    ROLES      AGE      VERSION    INTERNAL-IP    EXTERNAL-IP    OS-IMAGE      KERNEL-VERSION    CONTAINER-RUNTIME
E
docker-desktop  Ready    control-plane  38h    v1.25.0    192.168.65.4    <none>         Docker Desktop  5.10.16.3-microsoft-standard-WSL2  docker://20.10.17
7
C:\Users\kishore kumar\Desktop\Pda>
```



