

Creating Kubernetes Cluster using IBM Cloud Container Registry

| | |
|--------------|--------------------------|
| Team ID | PNT2022TMID38699 |
| Project Name | Plasma Donor Application |

```
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
54acb5a6fa8b: 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: sha256:7e60b8c662fa6836bed998ea2f97a3a31e7ddfbb131dd7096a2eecd8288bbf27 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 kubernetess/ibm_deployment.yaml
deployment.apps/pda created

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetess/flask_service.yaml
service/flask-app-service created

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetess/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
kubernetess 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
```

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1 item selected

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| | Name | Status | Worker pool | Zone | Private IP | Public IP | Version |
|-------------------------------------|----------|--------|-------------|----------|---------------|----------------|--------------|
| <input checked="" type="checkbox"/> | 0000000e | Normal | default | Milan 01 | 10.144.222.38 | 169.51.203.107 | 1.23.12_1548 |

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1 of 1 page

```
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 kubernetess/ibm_deployment.yaml
deployment.apps/pda unchanged

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetess/flask_service.yaml
service/flask-app-service unchanged

C:\Users\kishore kumar\Desktop\Pda>kubectl apply -f kubernetess/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
```

