

Creating Kubernetes Cluster using IBM Cloud Container Registry

```
C:\Windows\System32\cmd.e x + v
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: sha256:7e60b8c662fa6836bed998ea2f97a3a31e7ddfb131dd7096a2eecd8288bbf27 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
```

```
C:\Windows\System32\cmd.e x + v
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:
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

C:\Users\kishore kumar\Desktop\Pda>
```

IBM Cloud Container Registry

Search resources and products...

Repositories

Location: Tokyo

Search

Create +

Name	Image count	Namespace	Last updated
pda jp.kcr.jp/pda-01/pda	1	pda-01	3 hours ago

Items per page: 25 1-1 of 1 item

eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cda9cnf0752s5l1amvg/service/#/pod?namespace=default

kubernetes

default

Search

Workloads > Pods > Pda

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Services

Config and Storage

Config Maps

Persistent Volume Claims

Secrets

Storage Classes

CPU Usage

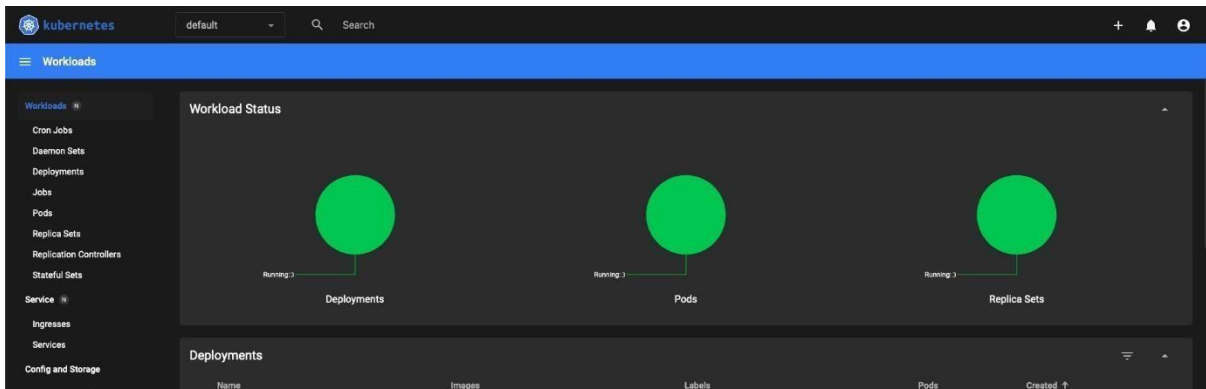
Memory Usage

Metadata

Name	Namespace	Created	Age	UID
pda	default	Nov 14, 2022	15 minutes ago	56656d67-1b15-4164-ad30-f2bd69535da0

Labels

run.pda



Team Id – PNT2022TMID48003

Project – Plasma Donor Application