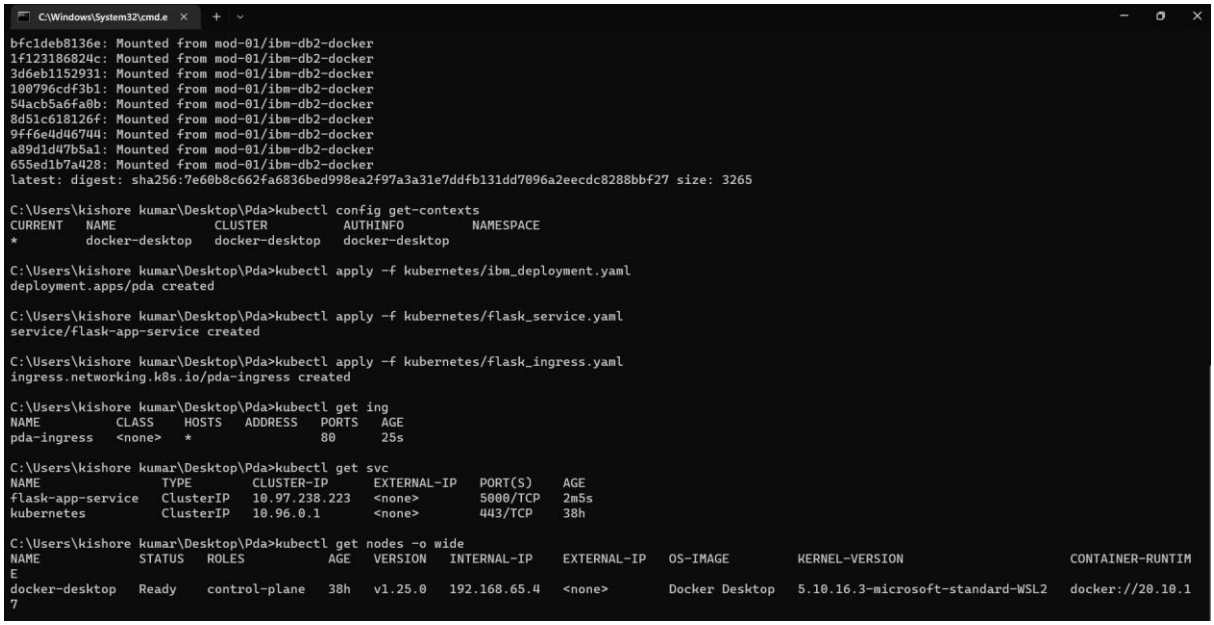
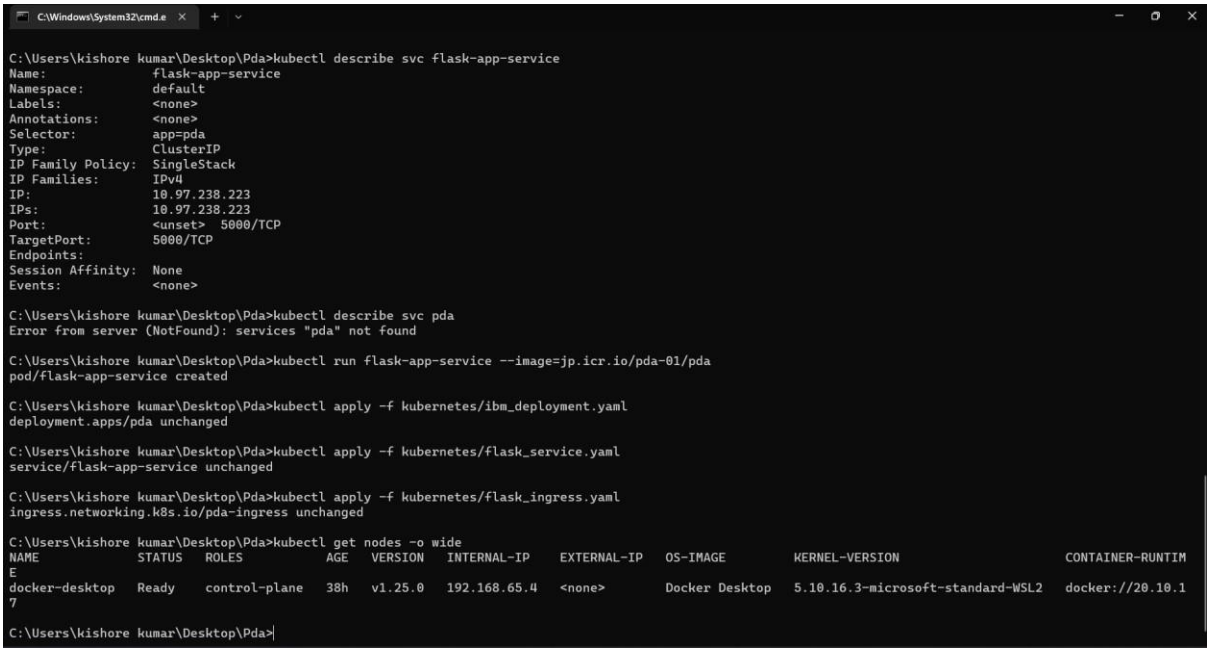
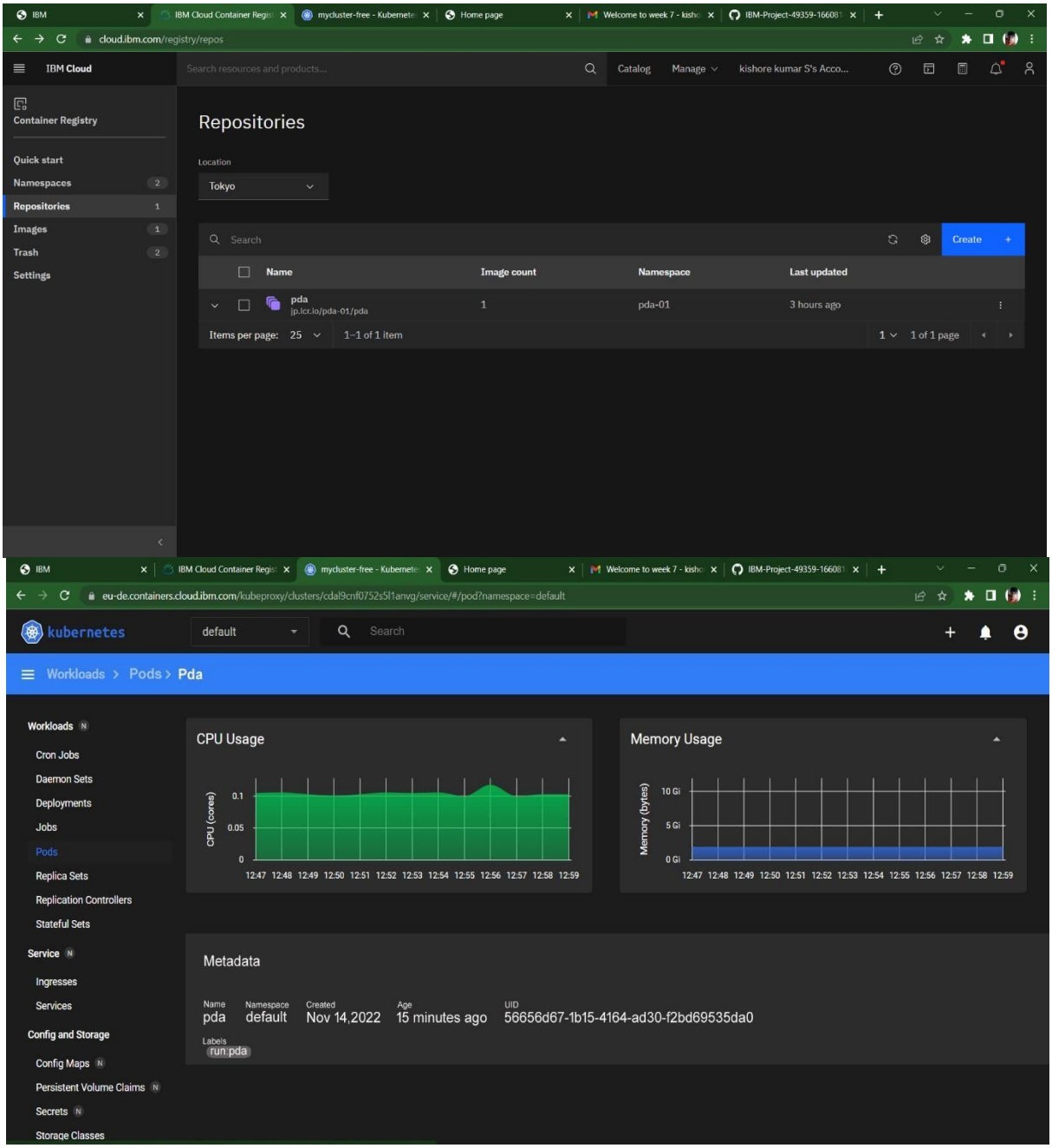
Creating Kubernetes Cluster using IBM Cloud Container Registry



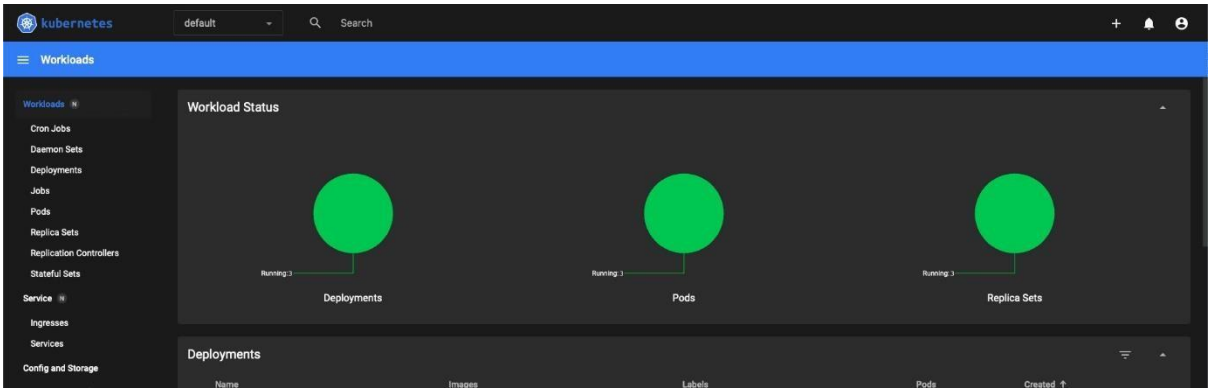
```
C:\Windows\System32\cmd.e
bfc1deb8136e: Mounted from mod-01/ibm-db2-docker
1f123186824c: Mounted from mod-01/ibm-db2-docker
3d6eb1152931: Mounted from mod-01/ibm-db2-docker
100796cdf3b1: Mounted from mod-01/ibm-db2-docker
54acb5a6fa8b: Mounted from mod-01/ibm-db2-docker
8d51c618126f: Mounted from 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: sha256:7e60b8c662fa6836bed998ea2f97a3a31e7ddfb131dd7096a2eecdc8288bbf27 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-RUNTIM
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://20.10.1
7
```



```
C:\Windows\System32\cmd.e

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-RUNTIM
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://20.10.1
7

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


IBM
IBM Cloud Container Regis
mycluster-free - Kubernete
Home page
Welcome to week 7 - kisho
IBM-Project-49359-166081
cloud.ibm.com/registry/repos
IBM Cloud
Search resources and products...
Catalog
Manage
kishore kumar S's Acco...
Container Registry
Quick start
Namespaces 2
Repositories 1
Images 1
Trash 2
Settings
Repositories
Location
Tokyo
Search
Create
Name
Image count
Namespace
Last updated
pda
jp.icr.io/pda-01/pda
1
pda-01
3 hours ago
Items per page: 25
1–1 of 1 item
1 of 1 page

IBM
IBM Cloud Container Regis
mycluster-free - Kubernete
Home page
Welcome to week 7 - kisho
IBM-Project-49359-166081
eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdal9cnf0752s5l1anvg/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
CPU (cores)
0.1
0.05
0
12:47 12:48 12:49 12:50 12:51 12:52 12:53 12:54 12:55 12:56 12:57 12:58 12:59
Memory Usage
Memory (bytes)
10 Gi
5 Gi
0 Gi
12:47 12:48 12:49 12:50 12:51 12:52 12:53 12:54 12:55 12:56 12:57 12:58 12:59
Metadata
Name
pda
Namespace
default
Created
Nov 14,2022
Age
15 minutes ago
UID
56656d67-1b15-4164-ad30-f2bd69535da0
Labels
run:pda



Team Id – PNT2022TMID51681

Project – Plasma Donar Application