Deployment Of App In IBM Cloud
Deploy In Kubernetes Cluster

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Project Name	Containment Zone Alerting Application

Deploy In Kubernetes Cluster:

1. Target the IBM Cloud Kubernetes Service region where you want to work.

```
ibmcloud cs region-set us-south
```

2. Set the context for the cluster in your CLI.

a. Get the command to set the environment variable and download the Kubernetes configuration files.

```
ibmcloud cs cluster-config cluster_kunal
```

b. Set the KUBECONFIG environment variable. Copy the output from the previous command and paste it in your terminal. The command output should look similar to the following.

```
> export

KUBECONFIG=/Users/$USER/.bluemix/plugins/container-service/clusters/< cluster_name >/<
cluster_configuration_file.yaml>
```

3. Verify that you can connect to your cluster by listing your worker nodes.

```
kubectl get nodes
```

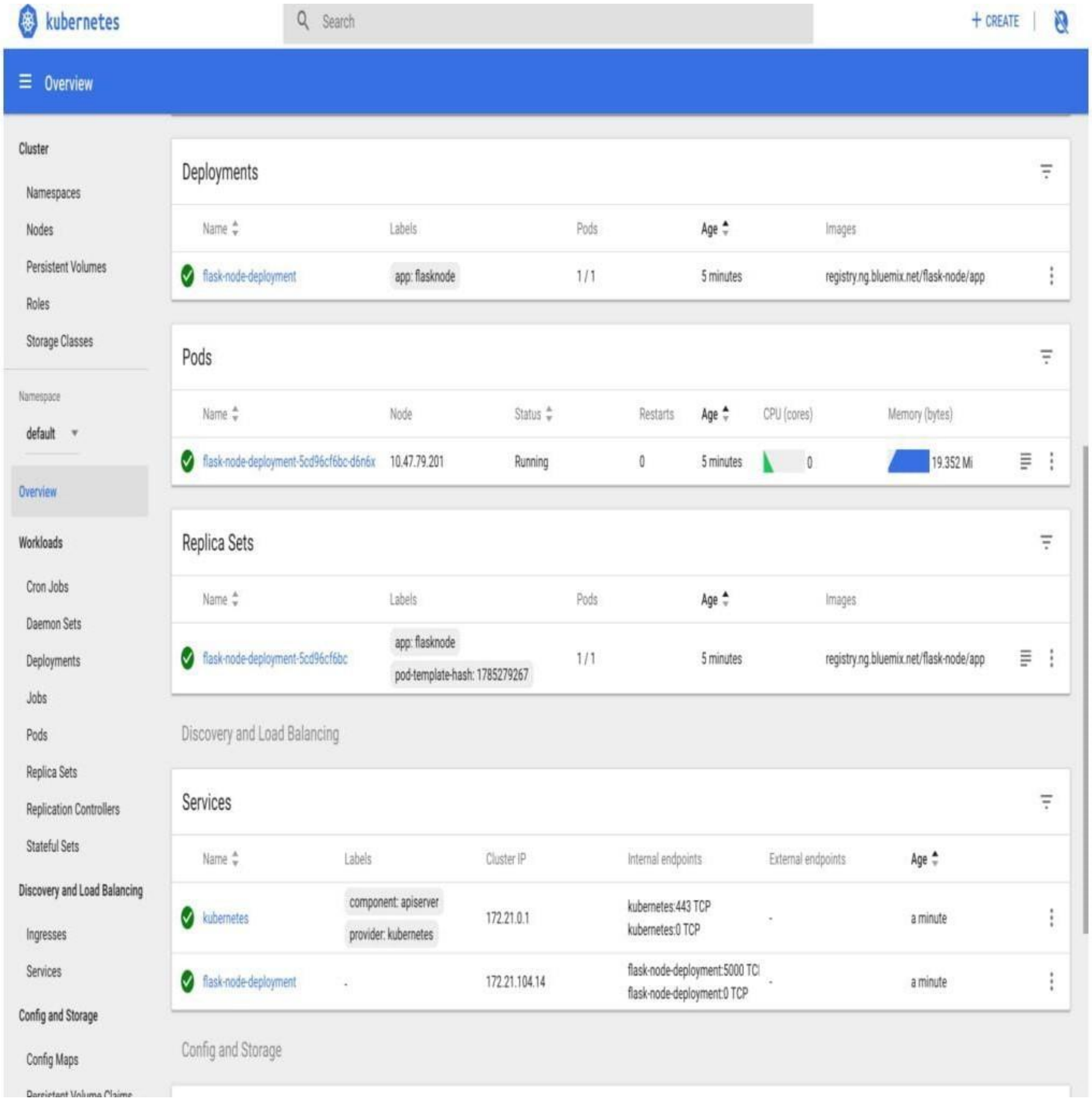
4. Create the deployment.

```
kubectl create -f deployment.yaml
```

5. Create the service.

```
kubectl create -f service.yaml
```

6. Look at the Kubernetes dashboard from the IBM Kubernetes Service overview page.



Deployments

Name	Labels	Pods	Age	Images
✓ flask-node-deployment	app: flasknode	1 / 1	5 minutes	registry.ng.bluemix.net/flask-node/app

Pods

Name	Node	Status	Restarts	Age	CPU (cores)	Memory (bytes)
✓ flask-node-deployment-5cd96cf6bc-d6n6x	10.47.79.201	Running	0	5 minutes	0	19.352 Mi

Replica Sets

Name	Labels	Pods	Age	Images
✓ flask-node-deployment-5cd96cf6bc	app: flasknode pod-template-hash: 1785279267	1 / 1	5 minutes	registry.ng.bluemix.net/flask-node/app

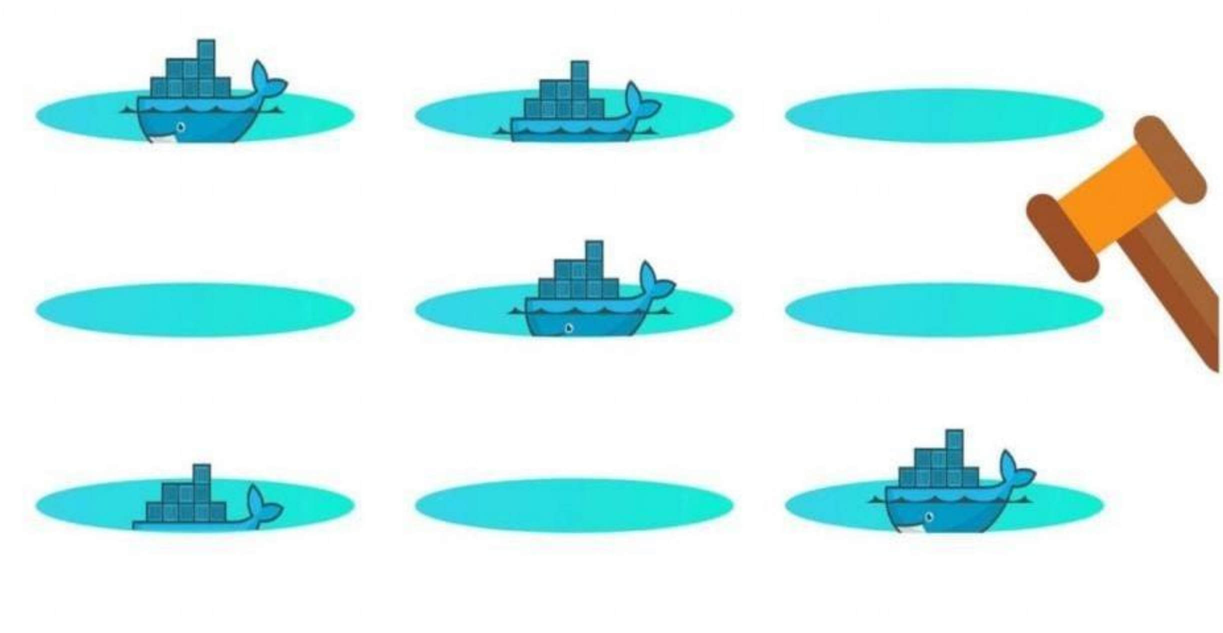
Discovery and Load Balancing

Services

Name	Labels	Cluster IP	Internal endpoints	External endpoints	Age
✓ kubernetes	component: apiserver provider: kubernetes	172.21.0.1	kubernetes:443 TCP kubernetes:0 TCP	-	a minute
✓ flask-node-deployment	-	172.21.104.14	flask-node-deployment:5000 TC flask-node-deployment:0 TCP	-	a minute

Config and Storage

7. Finally, go to your browser and ping the Public IP of your worker node



SAMPLE:

```
$ kubectl apply -f ./deploys/k8s-deployment/deployment.yaml
deployment.apps/k8s-nginx-deployment created

### RUN THE APPLICATION

$ kubectl port-forward svc/k8s-nginx-deployment 8080:80

### VERIFY THE APPLICATION RUNNING IN THE CLUSTER

$ kubectl get pods

NAME                              READY     STATUS      RESTARTS      AGE

k8s-nginx-deployment-68d8f8f8f4-f4x6x                   1/1       Running
                                                        0 30s

$ curl localhost:8080

<!DOCTYPE html>

<html>

<head>

<title>Welcome to newpark!</title>

</head>
```

```
<style>
    body {
        width: 35em; margin: 0
        auto;
        font-family: Tahoma, Verdana, Arial
        }
</body>
</html>
```