

SMART FASHION RECOMMENDER

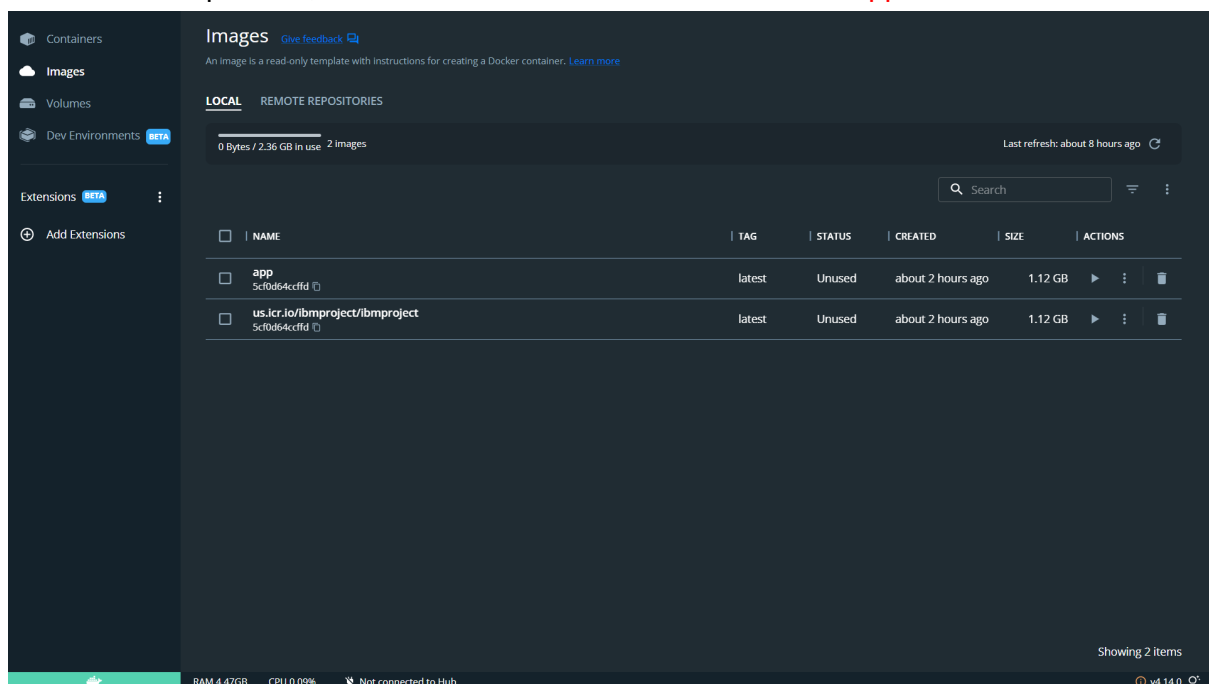
Team ID: PNT2022TMID07273

Creating a docker file

```
Dockerfile X
Dockerfile > ...
1 FROM python:3.10
2 RUN apt-get update
3 RUN mkdir /app
4 WORKDIR /app
5 COPY . /app
6 RUN pip install -r requirements.txt
7 EXPOSE 5000
8 ENTRYPOINT [ "python" ]
9 CMD [ "controller.py" ]
```

Creating a docker image

For this process, this command is used -> **docker build -t app .**



Push the image to the IBM Cloud Registry

This process is done with the following commands,

```
ibmcloud cr namespace-add ibmproject
```

```
ibmcloud cr login
```

```
docker tag app:latest us.icr.io/ibmproject/ibmproject:latest
```

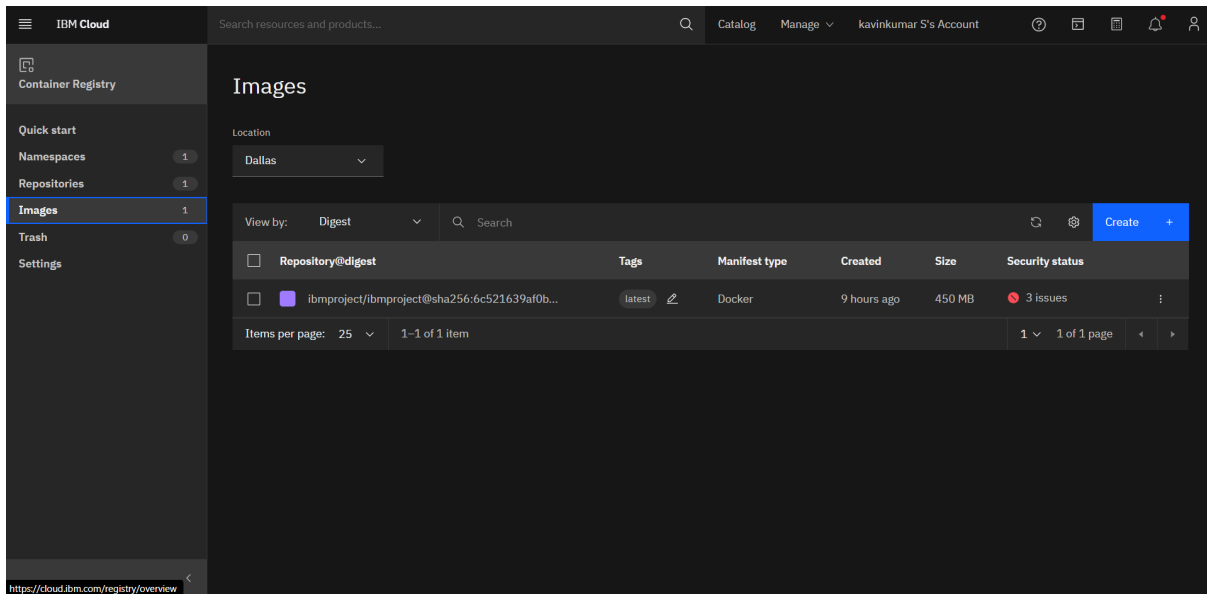
```
docker push us.icr.io/ibmproject/ibmproject:latest
```

The screenshot shows the IBM Cloud Container Registry interface. The left sidebar has a 'Namespaces' tab selected, showing 1 item. The main content area is titled 'Namespaces' and shows a table with one namespace: 'ibmproject'. The table columns are Name, Resource group, Repository count, Image count, and Retention policy. The 'ibmproject' namespace has a resource group of 'Default', 1 repository, 1 image, and a retention policy of 'Retain all images'.

Name	Resource group	Repository count	Image count	Retention policy
ibmproject	Default	1	1	Retain all images

The screenshot shows the IBM Cloud Container Registry interface. The left sidebar has a 'Repositories' tab selected, showing 1 item. The main content area is titled 'Repositories' and shows a table with one repository: 'ibmproject'. The table columns are Name, Image count, Namespace, and Last updated. The 'ibmproject' repository has an image count of 1, a namespace of 'ibmproject', and was last updated 9 hours ago.

Name	Image count	Namespace	Last updated
ibmproject	1	ibmproject	9 hours ago

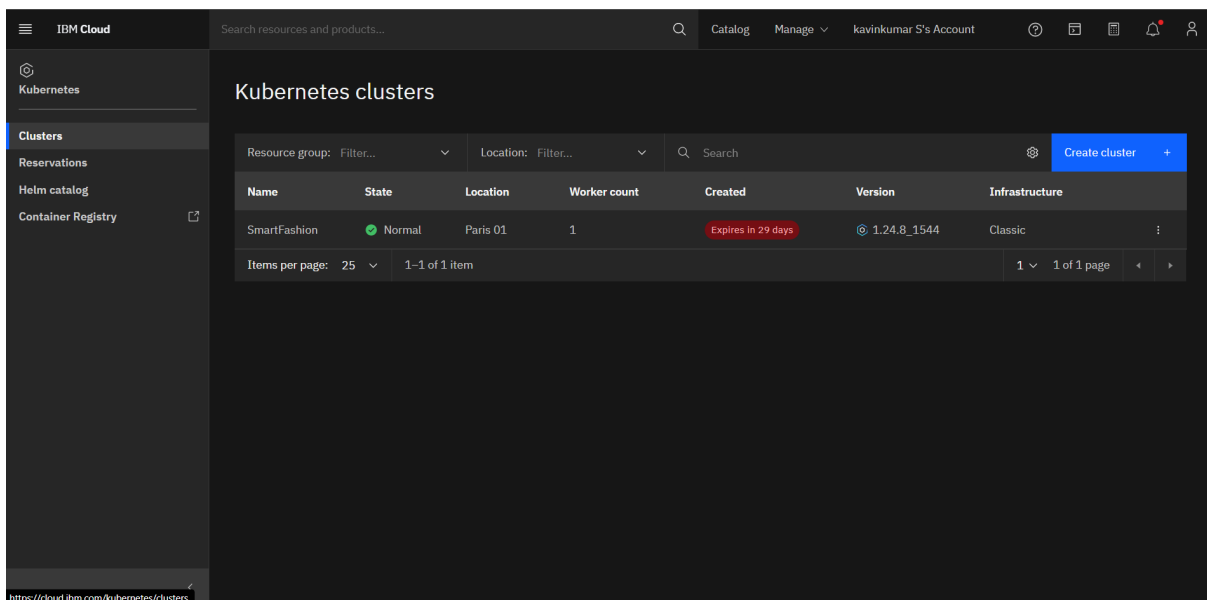


Deploy application to Kubernetes

ibmcloud ks cluster config --cluster SmartFashion

kubectll config current-context

kubectll expose deployment smartfashion --type=NodePort --name=service



kubernetes

default

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Create

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Ingress Classes

Services

Config and Storage

Config Maps

Persistent Volume Claims

Secrets

Storage Classes

Create from input

Create from file

Create from form

App name *

smartfashion

An 'app' label with this value will be added to the Deployment and Service that get deployed.
[Learn more](#)

Deployment or service with this name already exists within namespace.

Container image *

us.icr.io/ibmproject/ibmproject:latest

Enter the URL of a public image on any registry, or a private image hosted on Docker Hub or Google Container Registry.
[Learn more](#)

Number of pods *

3

A Deployment will be created to maintain the desired number of pods across your cluster.
[Learn more](#)

Service *

None

Optionally, an internal or external Service can be defined to map an incoming Port to a target Port seen by the container.
[Learn more](#)

Namespace *

default

Namespaces let you partition resources into logically named groups.
[Learn more](#)

Deploy

Preview

Cancel

Show advanced options

kubernetes

default

Search

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Workloads

Workloads

Cron Jobs

Daemon Sets

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Ingress Classes

Services

Config and Storage

Config Maps

Persistent Volume Claims

Secrets

Storage Classes

Deployments

Name	Images	Labels	Pods	Created ↑
smartfashion	Show all	Show all	3 / 3	5 hours ago

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created ↑
smartfashion-7cd9d86999-2297d	Show all	Show all	10.144.195.213	Running	0	1.00m	29.33Mi	5 hours ago
smartfashion-7cd9d86999-f4ptl	Show all	Show all	10.144.195.213	Running	0	1.00m	29.25Mi	5 hours ago
smartfashion-7cd9d86999-nw8l2	Show all	Show all	10.144.195.213	Running	0	1.00m	29.38Mi	5 hours ago

Replica Sets

Name	Images	Labels	Pods	Created ↑
smartfashion-7cd9d86999	Show all	Show all	3 / 3	5 hours ago