Open Shift
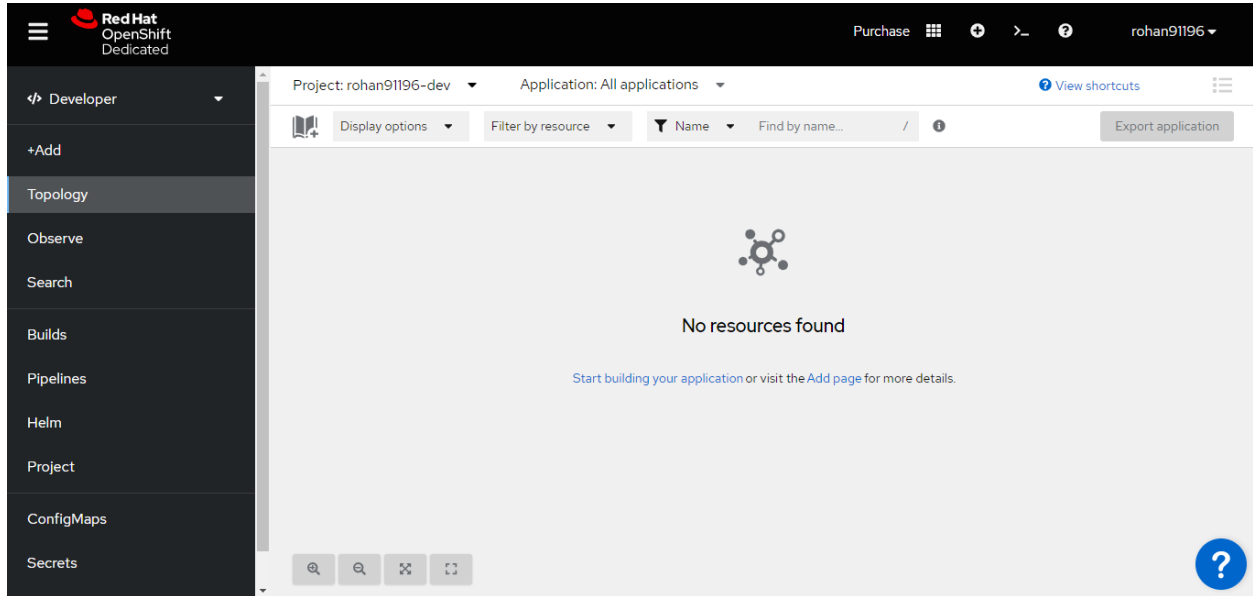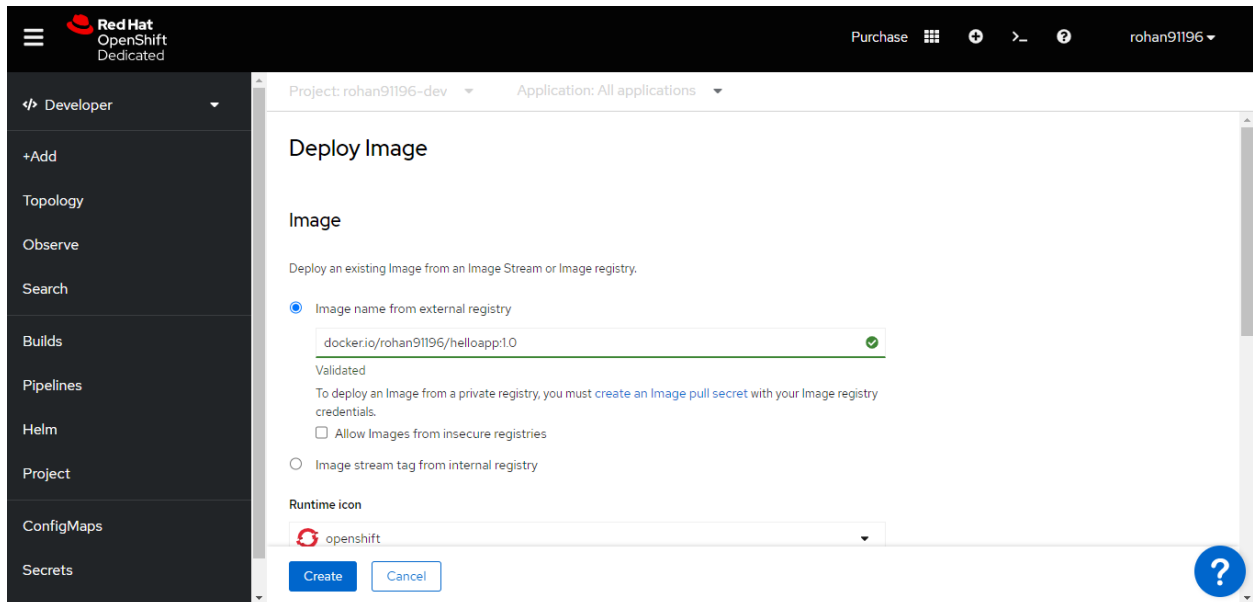
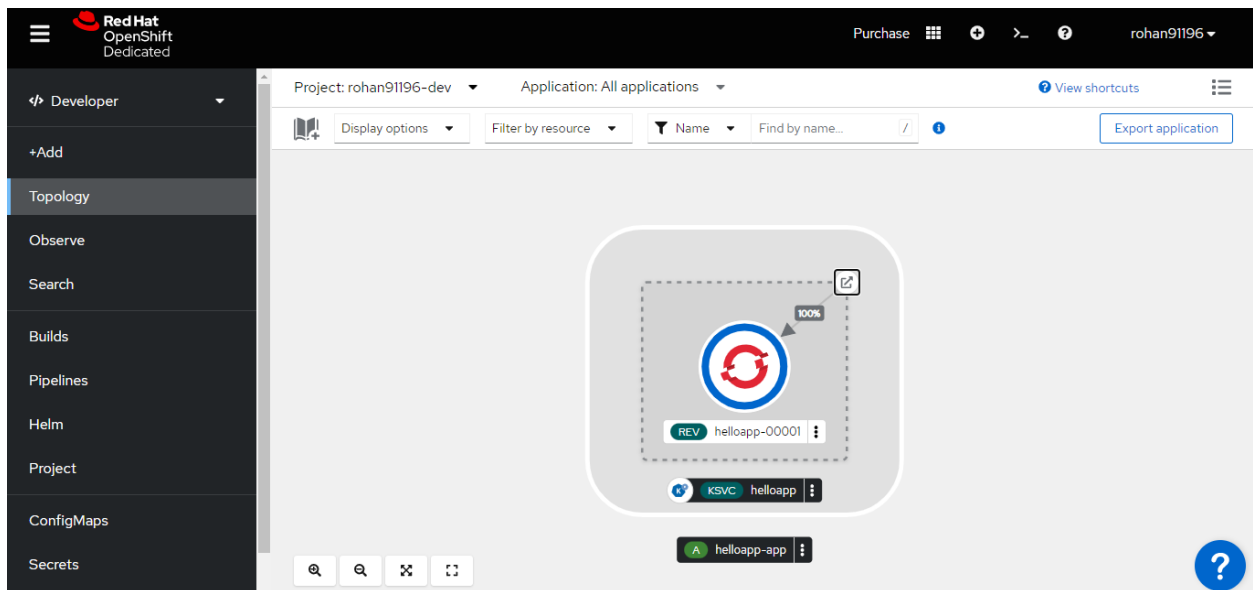## Step 1: Created Account on open shift

Step 2: Deployment using web U/I

Selecting containerize image which is in docker hub

Step 3: Pod is created

Step 4: POD Status
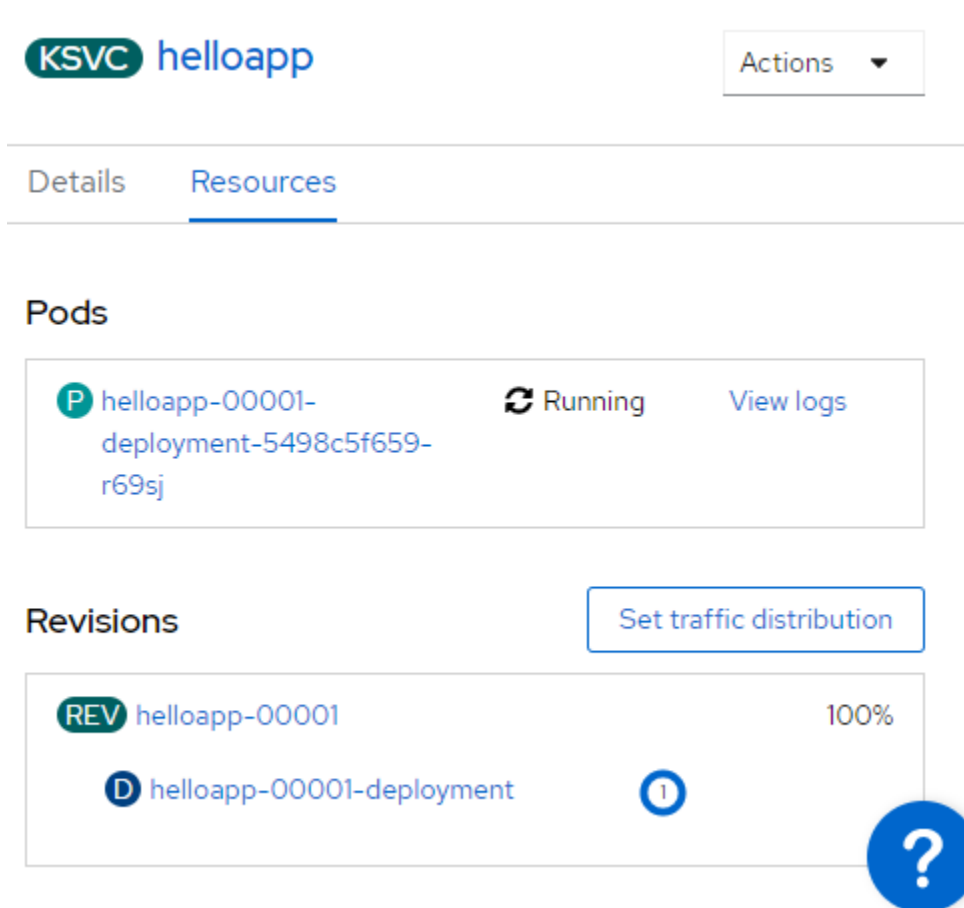
Step 5: Accessing Routed URL

This is demo project created to ddeploy flask app on docker

Step 5: Application is started and working fine

Deploying Application using CLI

Step 1: Use command new-app

Project: rohan91196-dev ▾

Observe

Dashboard | Metrics | Alerts | Events

Dashboard		Configuration	Revision		Time Range	Refresh Interval

OpenShift command line terminal ⬚ —

Terminal 1 ✕ ＋

```
--> Found container image e739d4a (4 days old) from docker.io for "docker.io/rohan91196/helloapp:latest"

    * An image stream tag will be created as "helloapp:latest" that will track this image

--> Creating resources ...
    imagestream.image.openshift.io "helloapp" created
    deployment.apps "helloapp" created
    service "helloapp" created
--> Success
    Application is not exposed. You can expose services to the outside world by executing one or more of the commands below:
     'oc expose service/helloapp'
    Run 'oc status' to view your app.
bash-4.4 ~ $
```

Step 2: Exposing the services of pod

```
--> Creating resources ...
    imagestream.image.openshift.io "helloapp" created
    deployment.apps "helloapp" created
    service "helloapp" created
--> Success
    Application is not exposed. You can expose services to the outside world by executing one or more of the commands below:
     'oc expose service/helloapp'
    Run 'oc status' to view your app.
bash-4.4 ~ $ ^C
bash-4.4 ~ $ oc expose service/helloapp
route.route.openshift.io/helloapp exposed
bash-4.4 ~ $
```

Step 3: Getting route of application

Observe

Dashboard | Metrics | Alerts | Events

OpenShift command line terminal

Terminal 1 ✕ ＋

```
--> Creating resources ...
    imagestream.image.openshift.io "helloapp" created
    deployment.apps "helloapp" created
    service "helloapp" created
--> Success
    Application is not exposed. You can expose services to the outside world by executing one or more of the commands below:
     'oc expose service/helloapp'
    Run 'oc status' to view your app.
bash-4.4 ~ $ ^C
bash-4.4 ~ $ oc expose service/helloapp
route.route.openshift.io/helloapp exposed
bash-4.4 ~ $
bash-4.4 ~ $ oc get route/helloapp
NAME      HOST/PORT                                                          PATH   SERVICES   PORT       TERMINATION   WILDCARD
helloapp  helloapp-rohan91196-dev.apps.sandbox-m3.1530.p1.openshiftapps.com         helloapp   3000-tcp                 None
bash-4.4 ~ $
```

Open shift commands Practice

```
NAME                                       READY   STATUS    RESTARTS   AGE
helloapp-65847988c4-7mg4p                  1/1     Running   0          17m
workspace3b1e5d94b09f47b5-7747d69bdf-69lh2 2/2     Running   0          22m
bash-4.4 ~ $ oc describe pods
Name:               helloapp-65847988c4-7mg4p
Namespace:          rohan91196-dev
Priority:           -3
Priority Class Name: sandbox-users-pods
Service Account:    default
Node:               ip-10-0-178-128.ec2.internal/10.0.178.128
Start Time:         Wed, 03 May 2023 18:54:58 +0000
Labels:             deployment=helloapp
                    pod-template-hash=65847988c4
Annotations:        k8s.ovn.org/pod-networks:
                        {"default":{"ip_addresses":["10.128.15.211/23"],"mac_address":"0a:58:0a:80:0f:d3","gateway_ips":["10.128.14.1"],"ip_address":"10.128.15.21
                    k8s.v1.cni.cncf.io/network-status:
```

```
f6f1d81a951e42b20acb43d32def11"
  Normal  Pulled    27m  kubelet        Successfully pulled image "registry.redhat.io/web-terminal/web-terminal-tooling-rhel8@sha256:f42093a4083f4c6c9bfa9b
e1b98fdcc6a0f6f1d81a951e42b20acb43d32def11" in 951.289627ms (951.304089ms including waiting)
  Normal  Created   27m  kubelet        Created container web-terminal-tooling
  Normal  Started   27m  kubelet        Started container web-terminal-tooling
  Normal  Pulling   27m  kubelet        Pulling image "registry.redhat.io/web-terminal/web-terminal-exec-rhel8@sha256:c82e89d9e8a5d1c9e5c94835d38cb601e5e1e
cb1e53cb038d0423b1b19d98683"
  Normal  Pulled    27m  kubelet        Successfully pulled image "registry.redhat.io/web-terminal/web-terminal-exec-rhel8@sha256:c82e89d9e8a5d1c9e5c94835d
38cb601e5e1ecb1e53cb038d0423b1b19d98683" in 571.931938ms (571.944935ms including waiting)
  Normal  Created   27m  kubelet        Created container web-terminal-exec
  Normal  Started   27m  kubelet        Started container web-terminal-exec
bash-4.4 ~ $ oc scale --current-replicas=1 --replicas=2 deployment/parksmap
Error from server (NotFound): deployments.apps "parksmap" not found
bash-4.4 ~ $ oc scale --current-replicas=1 --replicas=2 deployment/helloapp
deployment.apps/helloapp scaled
bash-4.4 ~ $
```

```
bash-4.4 ~ $ oc get pod
NAME                                        READY   STATUS    RESTARTS   AGE
helloapp-65847988c4-7mg4p                   1/1     Running   0          25m
helloapp-65847988c4-9mdns                   1/1     Running   0          41s
workspace3b1e5d94b09f47b5-7747d69bdf-69lh2  2/2     Running   0          30m
bash-4.4 ~ $
```