

Q: 9:

Configure application data

Deploy an application using the openshift/hello-openshift or image that meets the following requirements:

The application is part of a project named: acid

The application is named: phosphoric

The application uses a key named RESPONSE in a configuration map named sedicen

The application is running and available at

<http://phosphoricacid.apps.domain20.example.com> and display

Soda pop won't stop can't stop

Prerequisite:

```
$ podman pull docker.io/openshift/hello-openshift
```

```
$ podman login registry.ocp4.example.com:8443
```

Username: Developer

Password: developer

```
$ podman tag docker.io/openshift/hello-openshift
```

```
registry.ocp4.example.com:8443/openshift/hello-openshift
```

```
$ podman push registry.ocp4.example.com:8443/openshift/hello-openshift
```

Answer:

1. Search for the image:

```
$ podman search openshift/hello-openshift
```

2. Create the project

```
$ oc new-project acid
```

```
[student@workstation ~]$ oc new-project acid
Now using project "acid" on server "https://api.ocp4.example.com:6443".
```

```
You can add applications to this project with the 'new-app' command. For example, try:
```

```
oc new-app rails-postgresql-example
```

```
to build a new example application in Ruby. Or use kubectl to deploy a simple Kubernetes application:
```

```
kubectl create deployment hello-node --image=registry.k8s.io/e2e-test-images/agnhost:2.43 -- /agnhost serve-hostname
```

### 3. Run the application

```
$ oc new-app --name=phosphoric --image=openshift/hello-openshift
```

```
[student@workstation ~]$ oc new-app --name=phosphoric --image=open  
shift/hello-openshift  
--> Found container image 7af3297 (7 years old) from Docker Hub fo  
"openshift/hello-openshift"  
  
    * An image stream tag will be created as "phosphoric:latest" t  
hat will track this image  
  
--> Creating resources ...  
    imagestream.image.openshift.io "phosphoric" created  
    deployment.apps "phosphoric" created  
    service "phosphoric" created  
--> Success  
    Application is not exposed. You can expose services to the out
```

### 4. Verify

```
$ oc get pod
```

```
$ oc get service
```

```
[student@workstation ~]$ oc get pod  
NAME                      READY   STATUS            RESTARTS  
AGE  
phosphoric-78d4cdc598-q7jcz   0/1     ContainerCreating   0  
    6s  
[student@workstation ~]$ oc get service  
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)  
AGE  
phosphoric   ClusterIP   172.30.232.129   <none>        8080/TCP,8  
388/TCP   12s  
[student@workstation ~]$ oc expose service phosphoric --hostname=ph  
osphoric.apps.ocp4.example.com  
route.route.openshift.io/phosphoric exposed  
[student@workstation ~]$ curl phosphoric.apps.ocp4.example.com  
Hello OpenShift!
```

### 5. Configure the route

```
$ oc expose service phosphoric --hostname=phosphoric.apps.ocp4.example.com
```

### 6. Verify

```
$ curl phosphoric.apps.ocp4.example.com
```

### 7. Create config map

```
$ oc create cm sedicen --from-literal RESPONSE="Soda pop won't  
stop can't stop"
```

8. MapEnvironment variable with the Config map

```
$ oc set env deployment phosphoric --from=cm/sedicen
```

9. Verify

```
$ watch oc get pod
```

```
$ curl phosphoric.apps.ocp4.example.com
```

```
[student@workstation ~]$ oc expose service phosphoric --hostname=phosphoric.apps.ocp4.example.com  
route.route.openshift.io/phosphoric exposed  
[student@workstation ~]$ curl phosphoric.apps.ocp4.example.com  
Hello OpenShift!  
[student@workstation ~]$ oc create cm sedicen --from-literal RESPONSE="Soda pop won't pop can't stop"  
configmap/sedicen created  
[student@workstation ~]$ oc set env deployment phosphoric --from=cm/sedicen  
deployment.apps/phosphoric updated  
[student@workstation ~]$ watch oc get pod  
[student@workstation ~]$ curl phosphoric.apps.ocp4.example.com  
Soda pop won't pop can't stop  
[student@workstation ~]$
```