

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=openshift/hello-openshift
--> Found container image 7af3297 (7 years old) from Docker Hub for "openshift/hello-openshift"

    * An image stream tag will be created as "phosphoric:latest" that 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 outside world by choosing one of the following options:
```

4. Verify

```
$ oc get pod
```

```
$ oc get service
```

```
[student@workstation ~]$ oc get pod
NAME                                READY   STATUS              RESTARTS
phosphoric-78d4cdc598-q7jcz        0/1     ContainerCreating   0
6s
[student@workstation ~]$ oc get service
NAME      TYPE        CLUSTER-IP      EXTERNAL-IP      PORT(S)
phosphoric ClusterIP    172.30.232.129   <none>           8080/TCP,8388/TCP
12s
[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!
```

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 deploymentphosphoric--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=configmap/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 ~]$
```