Deploy Layer 7 API Gateway 9.4 to Kubernetes on local machine using Minikube

This is a cheatsheet on how to deploy the Layer 7 API Gateway version 9.4 to Kubernetes on your local machine using minikube. These instructions do not replace the full documentation located here: <https://docops.ca.com/ca-api-gateway/9-4/en/other-gateway-form-factors/using-the-container-gateway/getting-started-with-the-container-gateway/run-the-container-gateway-on-kubernetes/start-the-container-gateway-in-kubernetes>

$ cd /Users/kelma16/Documents/k8s/Gateway9.4

Unzip the 3 yaml files or download them from the documentation site shown above.

**Prepare License File:**

If working from the zip file you can skip this section. If you are working from freshly downloaded yaml files then you will need to prepare you license files. Please note you will need to take your license file from plain XML format first and then gzip it:

$ gzip license.xml

Then take this gz file and base64 encode it all onto one line of text:

$ openssl base64 -e -A -in license.xml.gz -out license.xml.gz.base64

Open this new file (license.xml.gz.base64) in a text editor and carefully paste it into the container-gateway-config.yml into the "ssg.license" field inside of a pair of double-quotes.  If you use a text editor that shows line numbers then please verify that the ssg.license is all on one line.

**Start minikube and apply our 3 yaml files**

$ minikube start --memory 4096

$ cd /Users/kelma16/Documents/k8s/Gateway9.4

$ kubectl apply -f container-gateway-config.yml -f container-gateway-mysql.yml -f container-gateway.yml

Keep running this line to see the gw and mysql are running:

$ kubectl get pods

**Get logs for a pod:**

$ kubectl logs gw-dc-559866c9d8-h67bs

**Connect with Policy Manager:**

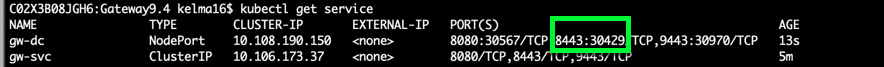
<https://docops.ca.com/ca-api-gateway/9-4/en/other-gateway-form-factors/using-the-container-gateway/getting-started-with-the-container-gateway/run-the-container-gateway-on-kubernetes/connect-the-policy-manager-in-kubernetes>

Expose your gw-dc deployment:

$ kubectl expose deployment gw-dc --type=NodePort

Find it the ports mapped for your service:

$ kubectl get service



Get the port number for 8443.  In the example above it is 30429.

Get your minikube ip:

$ minikube ip

/var/folders/pd/0hyx7tc92l1d9chm2_y0m1sw0000gn/T/com.microsoft.Word/WebArchiveCopyPasteTempFiles/p718

Now connect with Policy Manager.  For example:

* admin/password
* (Using the example above it would be: )  192.168.99.107:30429

**Cleanup (if needed):**

minikube stop

minikube delete