Portainer Web GUI - Environment Connection

With my K8 cluster now set up, I'm going to connect this cluster to my Portainer container running in my local Docker engine on another VM I have in Proxmox. For more details about my Portainer set up, check out my Docker Containers book. Portainer is a Web GUI container you can use for Kubernetes and Docker management, and it'll allow me to manage and deploy containers and clusters. See below to view how I set up my connection:

Portainer Agent

To connect this cluster, I'll be deploying a Portainer Agent onto the cluster. To do so, run the following command in any node of your cluster:

```
kubectl apply -f https://downloads.portainer.io/ce2-19/portainer-agent-k8s-nodeport.yaml
```

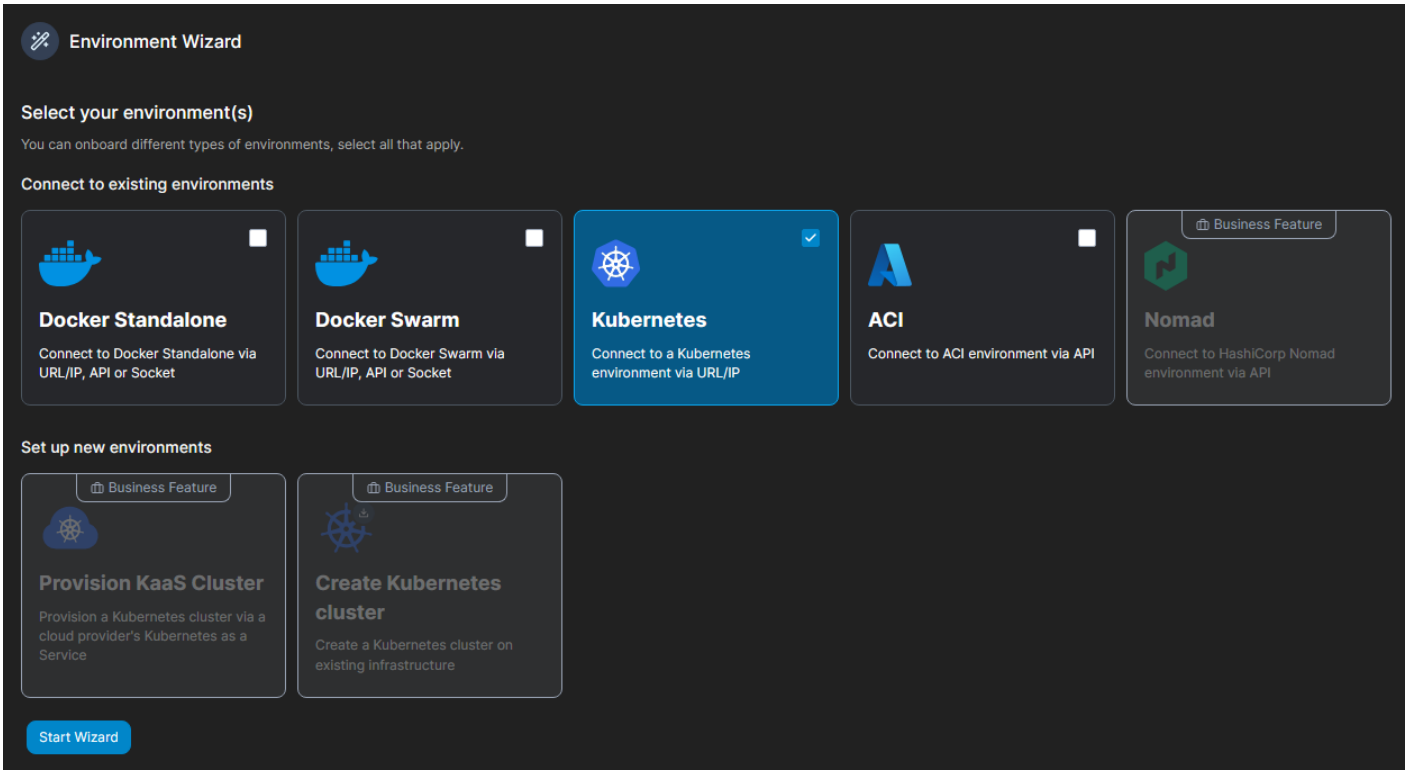
```
austin@k-ctrlr:~$ kubectl apply -f https://downloads.portainer.io/ce2-19/portain
er-agent-k8s-nodeport.yaml
namespace/portainer created
serviceaccount/portainer-sa-clusteradmin created
clusterrolebinding.rbac.authorization.k8s.io/portainer-crb-clusteradmin created
service/portainer-agent created
service/portainer-agent-headless created
deployment.apps/portainer-agent created
austin@k-ctrlr:~$
```

With this installed, check the status of the agent by running the following command:

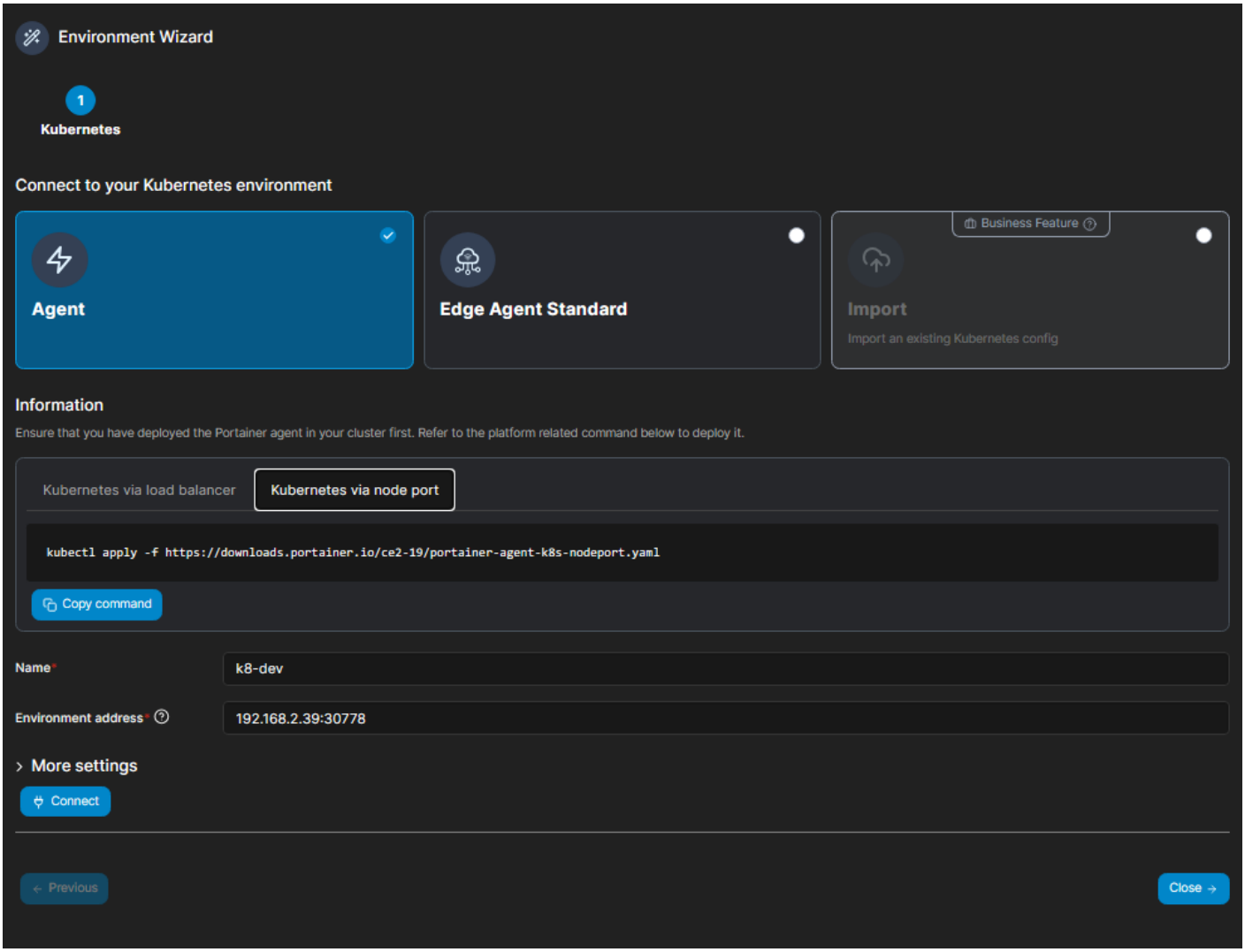
```
kubectl get pods --namespace=portainer
```

```
austin@k-ctrlr:~$ kubectl get pods --namespace=portainer
NAME                                READY   STATUS    RESTARTS   AGE
portainer-agent-548d57f7b5-2d6cj    1/1     Running   0          77s
austin@k-ctrlr:~$
```

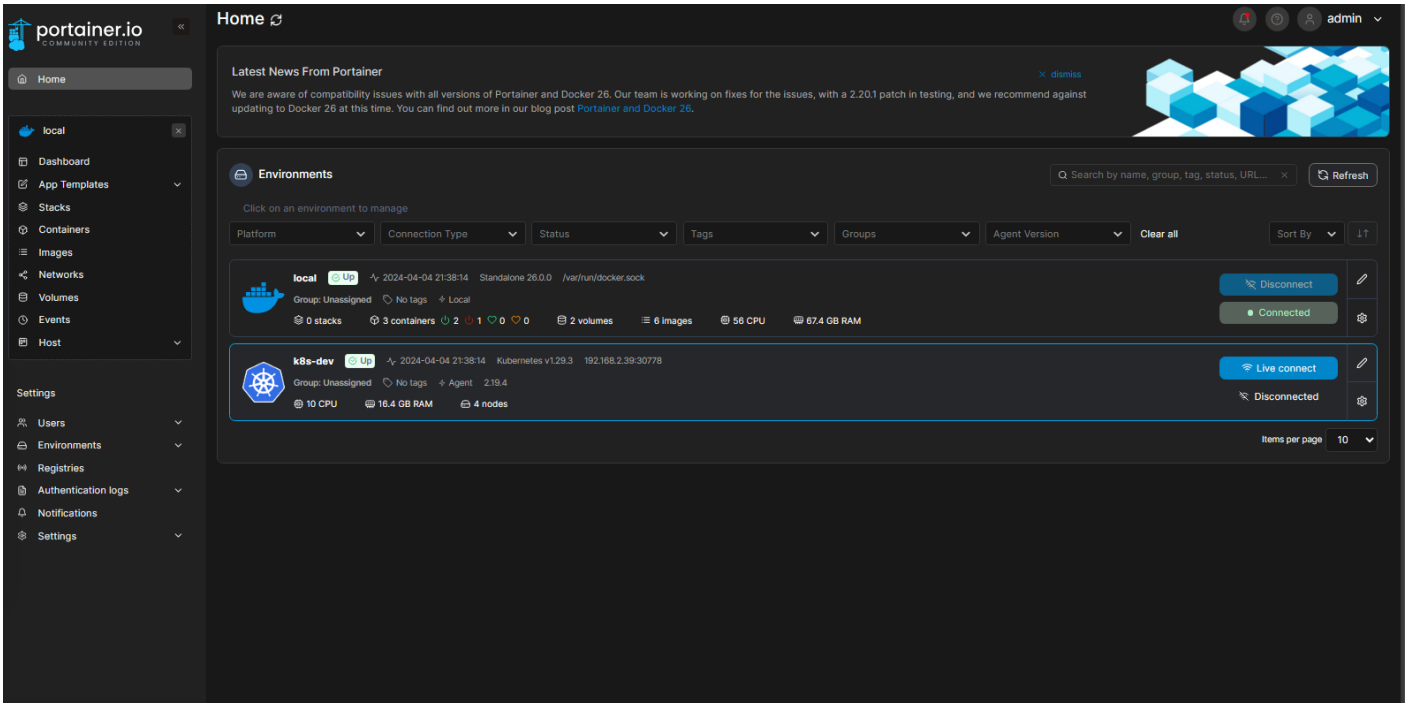
Now, open up your Portainer GUI in the web browser and navigate to Environment ---> Add. Select Kubernetes and start the wizard:



Next, enter your node IP address and specify port 30778. I'm using NordPort so 30778 applies; if you're using load balancer then use port 9001:



Your cluster should now connect, load, and be added to your dashboard:



Select "Live Connect" to view your cluster resources:

The cluster is now connected to Portainer and can be managed via the Web GUI!

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