

Lab7 - Kubernetes

Initialize cluster

1. cd to *devops-lab/vagrant-ubuntu20-multiple/* vagrant environment
 - Start all VMs .
2. On the master vagrant VM, initialize the cluster (just like docker swarm)
 - Is there any errors ? How to resolve ?
3. Run kubeadm join on each worker node to join the kubernetes cluster.
 - On the master, check that all nodes are in the cluster.

Manage pods

4. Create a pod through pod.yml yaml file.
 - On which node the pod is created ?
 - What is the pod's IP address ?
 - What is the container's name and ID ?
 - What is the image's name and ID ?
5. Remove the pod from the cluster.

Manage deployments

6. Create a deployment through deployment.yml yaml file.
 - What is the deployment's name and ID ?
 - How many pods are created ? On which nodes ? Give pods names, IDs, IPs, etc ...
 - Scale the pods number to 3.
 - On which node the third pod is created ? Give the name, ID, IP, etc ...
7. Remove 1 pod.
 - What happened to the deployment ?

Manage services

- 8.** Create a service through service.yml yaml file.
 - What is the service's name, ID and IP address ?
- 9.** Using a browser, test the service from the outside of kubernetes cluster.
- 10.** Remove the deployment and the service from the cluster.