# Cloud Data Centres David Williams Cybersecurity & IT security 4th Year C00263768 Lab 4

installing minikube:

command: New-Item -Path 'c:\' -Name 'minikube' -ItemType Directory -Force

Invoke-WebRequest -OutFile 'c:\minikube\minikube.exe' -Uri 'https://github.com/kubernetes/minikube/releases/latest/download/minikube-windows-amd64.exe' -UseBasicParsing

close powershell after install. (I closed my powershell gui before taking a picture)

Starting minikube on windows pc

command:

$oldPath = [Environment]::GetEnvironmentVariable('Path', [EnvironmentVariableTarget]::Machine)

if ($oldPath.Split(';') -inotcontains 'C:\minikube'){

[Environment]::SetEnvironmentVariable('Path', $('{0};C:\minikube' -f $oldPath), [EnvironmentVariableTarget]::Machine)

}

A screenshot of a computer screen

Description automatically generated

Interacting with cluster:

command: kubectl get po -A

A screenshot of a computer program

Description automatically generated

command: minikube kubectl -- get po -A

A screen shot of a computer

Description automatically generated

Minikube Dashboard:

command: minikube dashboard

A screen shot of a computer

Description automatically generated

Create a Deployment:

command: kubectl create deployment hello-node --image=registry.k8s.io/e2e-test-images/agnhost:2.39 -- /agnhost netexec --http-port=8080

A screenshot of a computer

Description automatically generated

View Deployments:

Command: kubectl get deployments



View the pod:

command: kubectl get pods



view cluster events:

command: kubectl get events

A screenshot of a computer screen

Description automatically generated

View the configuration of Kubernetes:

command: kubectl config view

A screenshot of a computer screen

Description automatically generated

View application logs for the container in the pod:

command: kubectl logs hello-node-ccf4b9788-gvwfk



Enabling addons:

command: minikube addons list

A screenshot of a computer screen

Description automatically generated

Enabling metric-server addon:

command: minikube addons enable metrics-server

A screen shot of a computer

Description automatically generated

Viewing pod and services created by addon:

command: kubectl get pod,svc -n kube-system

A screenshot of a computer screen

Description automatically generated

disabling the metrics addon:

command: minikube addons disable metrics-server

A screenshot of a computer screen

Description automatically generated

# Clean-up

deleting the hello node:

command: kubectl delete service hello-node

kubectl delete deployment hello-node

A screenshot of a computer

Description automatically generated