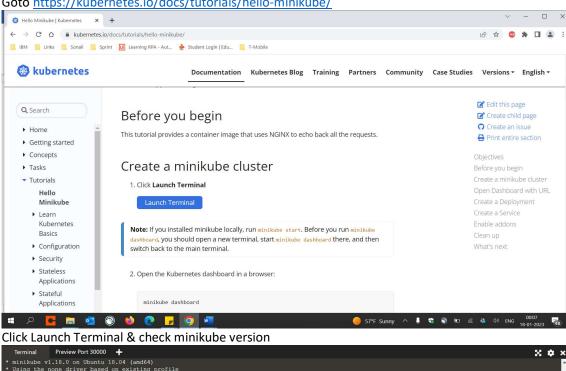
## Module-3: Cloud Testing Hands-on

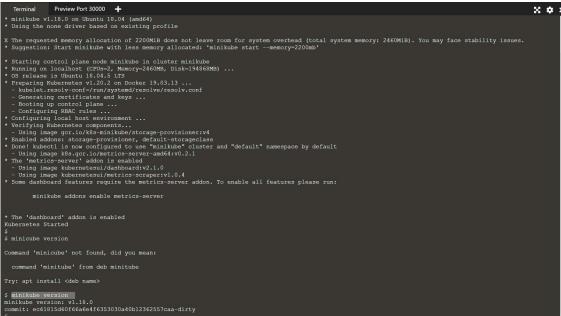
## Hands-on Assignments: (any 3 mandatory)

- 1. Create a VM and install docker and test the images inside the container with the commands
- 2. Install ansible and connect the nodes to master and execute the adhoc commands on ansible masternode vm and test the packages installed or not
- 3. Launch minikube cluster and execute the commands to test the pod, container with the kubectl commands
- 4. Create the poc on open shift architecture and its components and commands used on cluster

Launch minikube cluster and execute the commands to test the pod, container with the kubectl commands

Goto https://kubernetes.io/docs/tutorials/hello-minikube/





### Start a cluster

```
Terminal Preview Port 30000 +

"The 'metrics-server' addon is enabled
- Using image kubernetesui/dashboardv2.1.0
- Using image kubernetesui/dashboardv2.1.0.4

"Some dashboard features require the metrics-server addon. To enable all features please run:

minikube addons enable metrics-server

"The 'dashboard' addon is enabled
Kubernetes Started

"Re 'dashboard' addon is enabled
Kubernetes Started

"S minikube version

Command 'minicube' not found, did you mean:

sommand 'minicube' not found, did you mean:

command 'minicube' not found, did you mean:

sommand 'minicube' not found, did you mean:

sommand 'minicube' not desh minicube

Try: apt install <deb name>

$ minikube version

"Inikube version vi.18.0

"
```

## Check kubectl version

```
Terminal Preview Port 30000 +

minitube addons enable metrics-server

* The 'dashboard' addon is enabled
Knbernetes Started

* Sinicible version

Command 'minicube' not found, did you mean:

command 'minicube' from deb minitube

Try: apt install <deb name>

* minitube version

Command 'minicube' from deb minitube

Try: apt install <deb name>

* minitube version

minitube version

minitube version

* minitube vil.10.0 on Ubuntu 18.04 (am644)

* winitube vil.10.0 on Ubuntu 18.0 of (am646)

* Starting control plane node minitube in cluster minitube

* Starting control plane node minitube in cluster minitube

* Updating the running none "minitube" hare metal machine ...

* Seriolase is Ubuntu 18.04.5 in?

* Preparing Knbernetes vil.20.2 on Docker 19.03.13 ...

* Lublet roll vender "minitude" yettesd/resolvv/resolv.conf

* Varifying Knbernetes components...

* Varifying Knbernetes components...

* Varifying Rubernetes components...

* Varifying R
```

Cluster info

## Get nodes

```
Terminal Preview Pot 30000 +
minklube version: vi.18.0
commit: ecilolidoffcfasedeff353030a40b12362557caa-dirty
commit: ecilolidoffcfasedeff353030a40b1236257caa-dirty
commit: ecilolidoffcasedeff353030a40b1236257caa-dirty
c
```

Create deployment

# Get deployments

```
Temminal Proview Port 30000 +

X The requested memory allocation of 2200MB does not leave room for system overhead (total system memory: 2460MB). You may face stability issues.

* Suggestion: Butt ministube with less memory allocated 'ministube start —memory-2200mb'

* Starting control plane node ministube bare metal machine ...

* Strelease is Ubuntu 18.04.5 LTS

* Preparing Mubernets vi.20.2 on Docker 19.03.13 ...

* Lubblet.resolv-confe/tun/system/resolv-conf

* Configuring local host environment ...

* Vertifying Nubernets components...

* Vertifying Nubernets components...

* Vertifying Nubernets of Components...

* Vertifying Superins of Configuring Intellects of Configuring Inte
```

Get & describe pods

```
Terminal Preview Port 30000 +
                                                                                                                                                     ⊠ ‡ ×
Did you mean this?
cluster-info
Run 'kubectl --help' for usage.
$ kubectl cluster-info
To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.

$ kubectl get nodes

NAME STATUS ROLES AGE VERSION

minikube Ready control-plane,master 27m v1.20.2
```

### Get services

```
Terminal Preview Port 30000 +
                    Initialized True
Ready True
ContainersReady True
PodScheduled True
  Tolerations: node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
node.kubernetes.io/not-ready:NoExecute op=Exists for 300s

Events:

Type Reason Age From Message

Normal Scheduled 82s default-scheduler
Normal Pulling 81s kubelet
Normal Pulling 81s kubelet
Normal Pulled 78s kubelet
Successfully pulled image "registry.k8s.io/e2e-test-images/agnhost:2.39" in 3.366534374s
Normal Created 78s kubelet
Successfully pulled image "registry.k8s.io/e2e-test-images/agnhost:2.39" in 3.366534374s
Normal Started 77s kubelet
Started container agnhost
Skubectl get events
LAST SEN TYPE
Zm41s Normal Scheduled
2m35 Normal Pulled
2m37s Normal Pulled
2m37s Normal Fulled
2m37s Normal Started
2m38s Normal Started
2m39s Normal Started
2m31s Normal Started
2m33m Normal NodeRasSufficientMemory
33m Normal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MESSAGE
Successfully assigned default/hello-node-87cd7d8f5-6fw85 to minikube
Pulling image "registry.k8s.io/e2e-test-images/agnhost:2.39" in
Successfully pulled image "registry.k8s.io/e2e-test-images/agnhost:2.39" in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created container agnhost
Started container agnhost
Started container agnhost
Created pod: hello-node-87cd7d8f5-6fw85
Scaled up replica set hello-node-87cd7d8f5 to 1
Starting kubelet.
Node minikube status is now: NodeHasSufficientMemory
Node minikube status is now: NodeHasSufficientPID
Updated Node Allocatable limit across pods
Node minikube status is now: NodeHasSufficientPID
Updated Node Allocatable limit across pods
Node minikube went: Registered Node minikube in Controller
Node minikube status is now: NodeReady
Starting kube-proxy.
```

