IEEE SUMMER SCHOOL 2021

PRE REQUISITE SESSION 13th July 2021

Hello All,

Please refer to these articles to install kubernetes in your pc.

- https://phoenixnap.com/kb/install-kubernetes-on-ubuntu
- https://www.youtube.com/watch?v=MyNnVurtSf0

Herewtih the document, The Execution of codes are given below.

> sudo apt-get update

DOCKER INSTALLATION AND DEPLOYMENT

- sudo apt-get install docker.io
- > docker --version
- sudo systemctl enable docker
- sudo systemctl status docker
- > sudo systemctl start docker {If docker doesn't running}

KUBERNETES INSTALLATION

- > sudo apt-get install curl
- > curl -s
 https://packages.cloud.google.com/apt/doc/aptkey.gpg | sudo apt-key add {copy paste this code;
 All comes as a single line}

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- > sudo apt-add-repository "deb
 http://apt.kubernetes.io/ kubernetes-xenial main"
- sudo apt-get install kubeadm kubelet kubectl
- sudo apt-mark hold kubeadm kubelet kubectl
- kubeadm version
- sudo swapoff -a
- > sudo hostnamectl set-hostname master-node
- sudo hostnamectl set-hostname worker01

INITIALIZE KUBERNETES ON MASTER NODE

- > sudo kubeadm init --pod-networkcidr=10.244.0.0/16{Once this command finishes, it
 will display a kubeadm join message at the end.
 Make a note of the whole entry. This will be used
 to join the worker nodes to the cluster.}
- kubernetes-master:~\$ mkdir -p \$HOME/.kube
- kubernetes-master:~\$ sudo cp -i
 /etc/kubernetes/admin.conf \$HOME/.kube/config
- > kubernetes-master:~\$ sudo chown \$(id -u):\$(id -g)
 \$HOME/.kube/config
- > sudo kubectl apply -f
 https://raw.githubusercontent.com/coreos/flannel/ma
 ster/Documentation/kube-flannel.yml

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> kubectl get pods -all-namespaces

TO KNOW THE NODES

> kubectl get nodes