Day 7 Container Instance + AKS

Deploy the Image on Container Instance

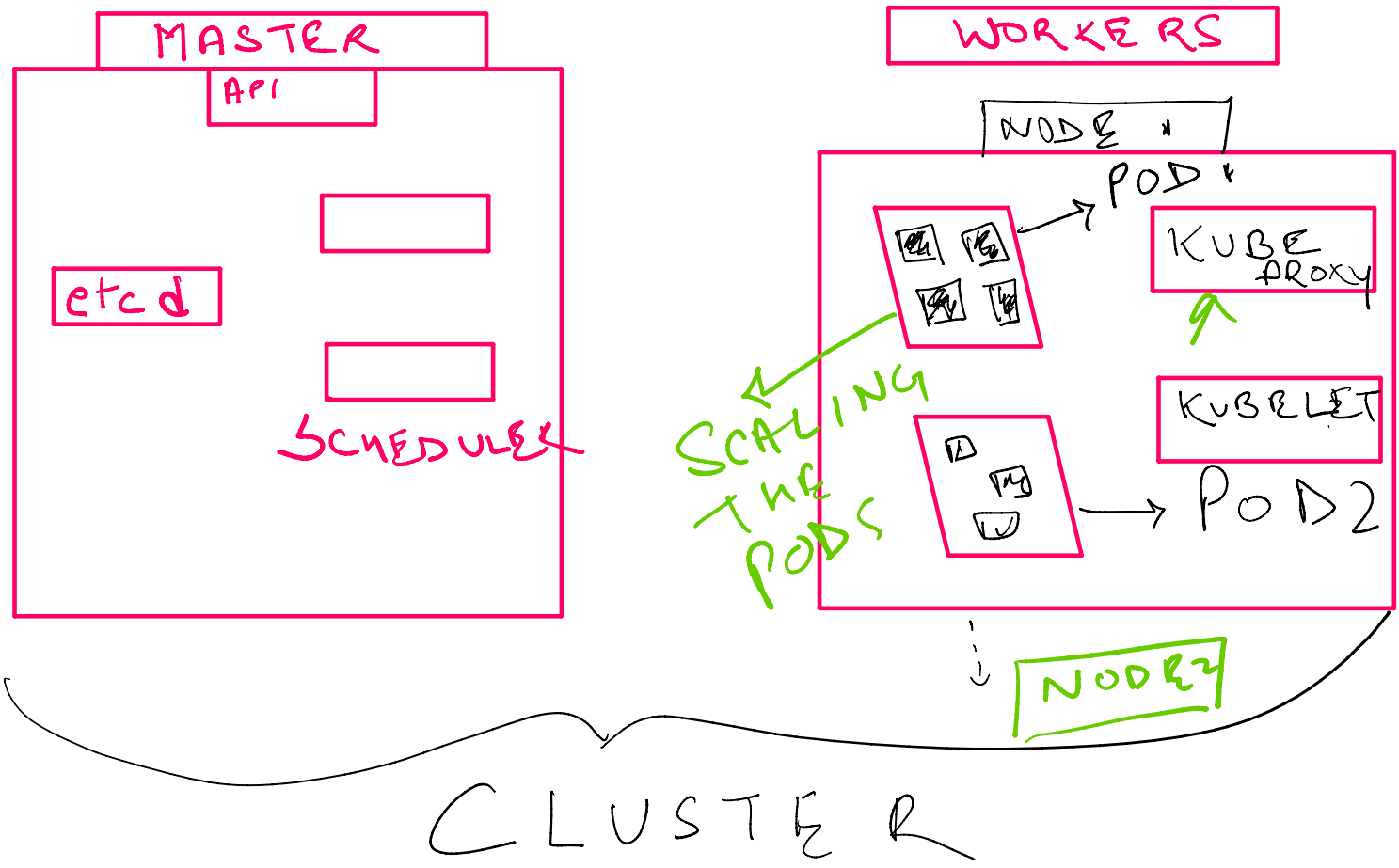
- Yesterday we tagged and pushed a image on ACR.
- Now we are going to run the image on Azure Container INSTANCE.
- You van run this image using VM instance as well.
  - Because it is IAAS
  - You mange the operations like - updating the version, updating the package, updating patches.
  - You have to take care of the runtime and dependencies.

Push The Image To Azure REPOS

- We will create a YAML file.
- Using the YAML file - we will create a CI pipeline.
- The aim of this CI process is to build and push the image to your azure container registry.

Kubernetes

- Kubernetes is a container MANAGEMENT PLATFORM.
- K8s
- It basically eliminates many of the manual process involved in deploying and scaling containered apps.



What is Master Node

- Node which controls and manages a set of worker nodes. It is called Master Node.
- Kube-**API** Server - This is frontend to the cluster. External comms are taken care here.

- **Etc d -** Cluster STATE database.
- **Kube Scheduler -** Responsible for scheduling activities for the container/Nodes based on etc d.

Worker Node

- **Kubelet -** execute container/pods on the node as instructed by the master node.
- **Kube proxy** - a network proxy/loadbalancer. It has all the iptables rules about the node to redirect service IP requests.

Demo - Manual Deployment Of AKS

- We created a azure kubernetes cluster.
- Inside that cluster we **manually** deployed the service and the workload.
- We used our existing rep [todo29].

Demo - CI/CD AKS

- Deploy a CI using classic editor or yaml.
- Create a manifest file:
    - YAML files defining your service deployment.