# Scheduling in Kubernetes

Explore Scheduling in K8s



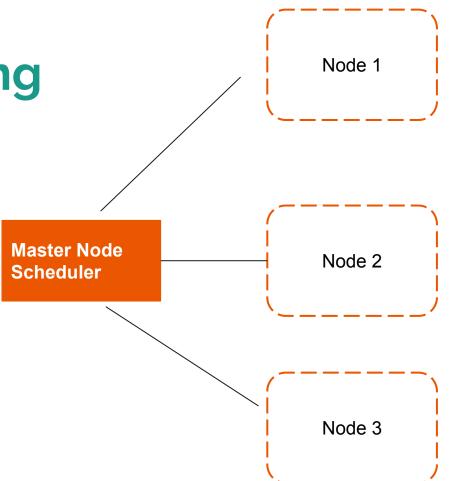


#### **Resource Scheduling**

- → What is Scheduling
- → Scheduling Process
- → nodeSelector
- → nodeName
- → Hands On Demonstration

## What is Scheduling

- Scheduling is a process to assign the Pods to Nodes, so that Kubectl can run them.
- Scheduler: It's a component on Kubernetes Master Node, which decide the Pods assignment on nodes.



### **Scheduling Process**

- Kubernetes Scheduler Select the suitable node for Pods -
- Resource Request vs Available Node Resources
- Configuration like Node Labels
- nodeSelector, Affinity and Anti-Affinity

#### nodeSelector

- nodeSelector is define in Pod Spec to limit which Node(s) the pod can be scheduled on.
- NodeSelector use Labels to select the suitable Node.

apiVersion: v1
kind: Pod
metadata:
name: cassandra
spec:
containers:
- name: cassandra
image: cassandra
nodeSelector:
disktype: ssd

#### nodeName

- User can bypass scheduling and assign Pod to a Specific Node using Node Name.
- NodeName is typically is not good option to use for Pod scheduling due to its limitations.

apiVersion: v1
kind: Pod
metadata:
name: nginx
spec:
containers:
- name: nginx
image: nginx
nodeName: kubeNode-01

#### **Hands On Demonstration**

# Thank You...

Don't be the Same! Be Better!!!