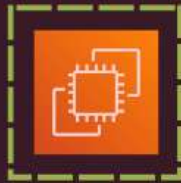




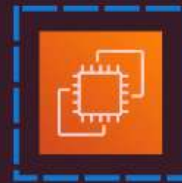
Kubernetes: Node Affinity vs Taints & Tolerations (Explained with Multiple Scenarios)



Worker Node 1
labels:
`node-type:general`



Worker Node 2
labels:
`node-type:high-cpu`
Taint:
`colour:Green`



Worker Node 3
labels:
`node-type:high-memory`
Taint:
`colour:Blue`

S	Type of Pods	Happens
1	General Pod, no affinity, no toleration	Runs in Worker Node 1
2	Pod with Node Affinity(high-cpu), no toleration (requiredDuringSchedulingIgnoreDuringExecution)	Stays unscheduled since required node is tainted
3	Pod with Node Affinity(high-cpu), no toleration (preferredDuringSchedulingIgnoreDuringExecution)	Tries to place in high-cpu node as pod not has toleration it goes to 1
4	Pod with Tolerations: colour: <code>Green</code> , no affinity	Scheduled on 1 or 2
5	Pod with Tolerations: colour: <code>Green</code> , colour: <code>Blue</code> , no affinity	Scheduled on any node (1 or 2 or 3)
6	Pod with Node Affinity(high-cpu) (requiredDuringSchedulingIgnoreDuringExecution) & Tolerations: colour: <code>Green</code>	Scheduled on Worker Node 2