Configure Taints and Tolerants

In Kubernetes, Ttaints and Tolerants work together to ensure that pods are not scheduled onto inappropriate nodes.

1. Adding a Taint to a Node

A Taint is applied to a node and prevents pods from being scheduled onto it unless those pods have a matching Toleration.

Syntax:

\$ kubectl taint nodes <node-name> <key>=<value>:<effect>

Example:

\$ kubectl taint nodes node1 key1=value1:NoSchedule

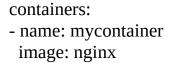
- This taint means: "Do not schedule pods onto `node1` unless they tolerate this taint."

2. Adding a Toleration to a Pod

A Toleration is added to a pod spec, allowing it to be scheduled onto nodes with matching taints.

Pod Spec: YAML code

apiVersion: v1
kind: Pod
metadata:
name: mypod
spec:
tolerations:
- key: "key1"
operator: "Equal"
value: "value1"
effect: "NoSchedule"



- This pod can be scheduled onto nodes tainted with `key1=value1:NoSchedule`.
- 3. Remove a Taint from a Node

\$ kubectl taint nodes <node-name> <key>:<effect>-

Example:

\$ kubectl taint nodes node1 key1:NoSchedule-