SCHEDULING

Scheduling

Pod Specification

Most scheduling decisions can be made as part of the Podspec. A pod specification contains several fields that inform scheduling, namely:

- **`nodeName`**
- **`nodeSelector`**
- **`affinity`**
- **`schedulerName`**
- **`tolerations`**

Click on the boxes to learn more about the fields in a Pod specification.

Fields in a Pod Specification

nodeName and nodeSelector — Close

The **`nodeName`** and **`nodeSelector`** options allow a Pod to be assigned to a single node or a group of nodes with particular labels.

affinity and anti-affinity — Close

Affinity and anti-affinity can be used to require or prefer which node is used by the scheduler. If using a preference instead, a matching node is chosen first, but other nodes would be used if no match is present.

taints and tolerations — Close

The use of taints allows a node to be labeled such that Pods would not be scheduled for some reason, such as the cp node after initialization. A toleration allows a Pod to ignore the taint and be scheduled assuming other requirements are met.

schedulerName

Close

Should none of the options above meet the needs of the cluster, there is also the ability to deploy a custom scheduler. Each Pod could then include a **`schedulerName`** to choose which schedule to use.