Replication Controller

- Consists of
  - Pod template
  - Count
  - Label Selector
- Kube will try to keep $count copies of pods matching the label selector running
- If too few copies are running the replication controller will start a new pod somewhere in the cluster

Replication Controller

Replication Controller

- Ensures that a Pod or homogeneous set of Pods are always up and available
- Always maintains desired number of Pods
  - If there are excess Pods, they get killed
  - New pods are launched when they fail, get deleted, or terminated
- Creating a replication controller with a count of 1 ensures that a Pod is always available
- Replication Controller and Pods are associated through Labels

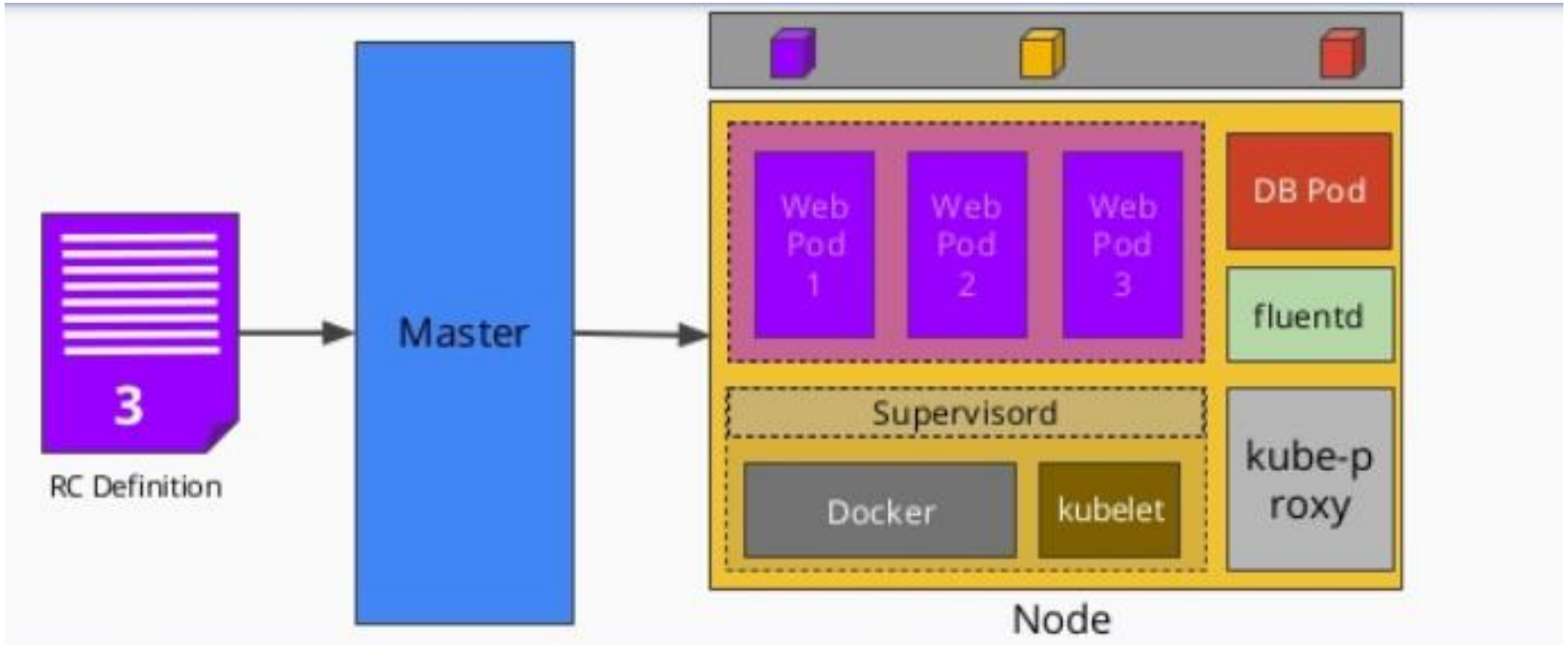
Replica Set

- **Replica set** is the next-get Replication Controller
- It support a new selector that can do the selection based on **filtering** according a **set of values**
  - Example: Environnent Ethier "Dev" or "QA«
  - not only based on equality, like replication controller
    - e.g "Environment" == "Dev“
- This **Replica Set**, rather than the replication controller, is used by the Deployment Object

Replica Set

- Replica Sets are the next generation Replication Controllers
- Ensures specified number of pods are always running
- Pods are replaced by Replica Sets when a failure occurs
  - New pods are automatically scheduled
- Labels and Selectors are used for associating Pods with Replica Sets
- Usually combined with Pods when defining the deployment

Scaling Pods with Replication Controller



Demo

- Scaling Pods with Replication Controller


THANK
YOU!