KUBERNETES ARCHITECTURE

Kubernetes Architecture

Containers

While Kubernetes orchestration does not allow direct manipulation on a container level, we can manage the resources containers are allowed to consume.

In the resources section of the **PodSpec** you can pass parameters which will be passed to the container runtime on the scheduled node:

```
resources:
  limits:
    cpu: "1"
    memory: "4Gi"
  requests:
    cpu: "0.5"
    memory: "500Mi"
```

Another way to manage resource usage of the containers is by creating a **ResourceQuota** object, which allows hard and soft limits to be set in a namespace. The quotas allow management of more resources than just CPU and memory and allows limiting several objects.

A beta feature in v1.12 uses the **scopeSelector** field in the quota spec to run a pod at a specific priority if it has the appropriate **priorityClassName** in its pod spec.