

Kubernetes is a powerful tool for managing and utilizing available resources to run containers. Resource requests and limits provide a great deal of control over how resources will be allocated. In this lesson, we will talk about what resource requests and limits do, and also demonstrate how to set resource requests and limits for a container.

Relevant Documentation

- <https://kubernetes.io/docs/concepts/configuration/manage-compute-resources-container/#resource-requests-and-limits-of-pod-and-container>

Lesson Reference

Specify resource requests and resource limits in the container spec like this:

```
apiVersion: v1
kind: Pod
metadata:
  name: my-resource-pod
spec:
  containers:
  - name: myapp-container
    image: busybox
    command: ['sh', '-c', 'echo Hello Kubernetes! && sleep 3600']
    resources:
      requests:
        memory: "64Mi"
        cpu: "250m"
      limits:
        memory: "128Mi"
        cpu: "500m"
```