kubectl apply -f <https://raw.githubusercontent.com/open-policy-agent/gatekeeper/release-3.14/deploy/gatekeeper.yaml>

Verify installation:

kubectl get pods -n gatekeeper-system

Create a ConstraintTemplate to **disallow "latest" image tags :**

**k8srequiredimagetag.yaml:**

**apiVersion: templates.gatekeeper.sh/v1beta1**

**kind: ConstraintTemplate**

**metadata:**

**name: k8srequiredimagetag**

**spec:**

**crd:**

**spec:**

**names:**

**kind: K8sRequiredImageTag**

**targets:**

**- target: admission.k8s.gatekeeper.sh**

**rego: |**

**package k8srequiredimagetag**

**violation[{"msg": msg}] {**

**container := input.review.object.spec.containers[\_]**

**endswith(container.image, ":latest")**

**msg := sprintf("Image tag 'latest' is not allowed: %v", [container.image])**

**}**

**kubectl apply -f k8srequiredimagetag.yaml**

**Create a Constraint to enforce the image tag policy:**

no-latest-tag.yaml

**apiVersion: constraints.gatekeeper.sh/v1beta1**

**kind: K8sRequiredImageTag**

**metadata:**

**name: no-latest-tag**

**spec:**

**match:**

**kinds:**

**- apiGroups: [""]**

**kinds: ["Pod"]**

Create a ConstraintTemplate for **resource requests/limits:**

k8srequiredresources.yaml:

**apiVersion: templates.gatekeeper.sh/v1beta1**

**kind: ConstraintTemplate**

**metadata:**

**name: k8srequiredresources**

**spec:**

**crd:**

**spec:**

**names:**

**kind: K8sRequiredResources**

**targets:**

**- target: admission.k8s.gatekeeper.sh**

**rego: |**

**package k8srequiredresources**

**violation[{"msg": msg}] {**

**container := input.review.object.spec.containers[\_]**

**not container.resources.requests.cpu**

**msg := sprintf("CPU request is missing for container: %v", [container.name])**

**}**

**violation[{"msg": msg}] {**

**container := input.review.object.spec.containers[\_]**

**not container.resources.limits.memory**

**msg := sprintf("Memory limit is missing for container: %v", [container.name])**

**}**

enforce-resource-limits.yaml

**apiVersion: constraints.gatekeeper.sh/v1beta1**

**kind: K8sRequiredResources**

**metadata:**

**name: enforce-resource-limits**

**spec:**

**match:**

**kinds:**

**- apiGroups: [""]**

**kinds: ["Pod"]**

**kubectl apply -f enforce-resource-limits.yaml**