

Red Hat OpenShift GitOps 1.12

Managing resource use

Configuring resource requests and limits for Argo CD workloads

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Abstract

This document provides instructions for configuring workloads with resource requests and limits. It also discusses how to patch Argo CD instance to update the resource requirements for all or any of the workloads after installation.

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CHAPTER 1. CONFIGURING RESOURCE QUOTA OR REQUESTS

With the Argo CD custom resource (CR), you can create, update, and delete resource requests and limits for Argo CD workloads.

1.1. CONFIGURING WORKLOADS WITH RESOURCE REQUESTS AND LIMITS

You can create Argo CD custom resource workloads with resource requests and limits. This is required when you want to deploy the Argo CD instance in a namespace that is configured with resource quotas.

The following Argo CD instance deploys the Argo CD workloads such as **Application Controller**, **ApplicationSet Controller**, **Dex**, **Redis**,**Repo Server**, and **Server** with resource requests and limits. You can also create the other workloads with resource requirements in the same manner.

```
apiVersion: argoproj.io/v1beta1
kind: ArgoCD
metadata:
 name: example
spec:
 server:
  resources:
   limits:
    cpu: 500m
    memory: 256Mi
   requests:
    cpu: 125m
    memory: 128Mi
  route:
   enabled: true
 applicationSet:
  resources:
   limits:
    cpu: '2'
    memory: 1Gi
   requests:
    cpu: 250m
    memory: 512Mi
 repo:
  resources:
   limits:
    cpu: '1'
    memory: 512Mi
   requests:
    cpu: 250m
    memory: 256Mi
 dex:
  resources:
   limits:
    cpu: 500m
    memory: 256Mi
   requests:
    cpu: 250m
```

```
memory: 128Mi
redis:
 resources:
  limits:
   cpu: 500m
   memory: 256Mi
  requests:
   cpu: 250m
   memory: 128Mi
controller:
 resources:
  limits:
   cpu: '2'
   memory: 2Gi
  requests:
   cpu: 250m
   memory: 1Gi
```

1.2. PATCHING ARGO CD INSTANCE TO UPDATE THE RESOURCE REQUIREMENTS

You can update the resource requirements for all or any of the workloads post installation.

Procedure

Update the **Application Controller** resource requests of an Argo CD instance in the Argo CD namespace.

```
oc -n argocd patch argocd example --type='json' -p='[{"op": "replace", "path": "/spec/controller/resources/requests/cpu", "value":"1"}]'
oc -n argocd patch argocd example --type='json' -p='[{"op": "replace", "path": "/spec/controller/resources/requests/memory", "value":"512Mi"}]'
```

1.3. REMOVING RESOURCE REQUESTS

You can also remove resource requirements for all or any of your workloads after installation.

Procedure

Remove the **Application Controller** resource requests of an Argo CD instance in the Argo CD namespace.

```
oc -n argocd patch argocd example --type='json' -p='[{"op": "remove", "path": "/spec/controller/resources/requests/cpu"}]'
oc -n argocd argocd patch argocd example --type='json' -p='[{"op": "remove", "path": "/spec/controller/resources/requests/memory"}]'
```