


# Redis Cluster Patching in GKE

Redis Operator has been deployed by GKE admin [krasuski.s@pg.com](mailto:krasuski.s@pg.com) in MCT team in the namespace **redis-operator-loyalty** as application team does not have the rights.

On the time of deployment the operator version is 1.3.0

 [redis-operator/README.md at master · spotahome/redis-operator](#)

### Requirements

Kubernetes version: 1.21 or higher Redis version: 6 or higher

Redis operator is being tested against kubernetes 1.25 1.26 1.27 and redis 6 All dependencies have been vendored, so there's no need to any additional download.

### Operator deployment on Kubernetes

In order to create Redis failovers inside a Kubernetes cluster, the operator has to be deployed. It can be done with plain old [deployment](#), using [Customize](#) or with the provided [Helm chart](#).

### Using the Helm chart

From the root folder of the project, execute the following:

```
helm repo add redis-operator https://spotahome.github.io/redis-operator
helm repo update
helm install redis-operator redis-operator/redis-operator
```

The operator has been tested against Kubernetes versions 1.25,1.26 and 1.27 with redis 6

- The image being used in the redis-cluster and sentinel is the

```
1 redis:6.2.6-alpine
```

If the Operator gets updated and tested against redis 7.x then we can proceed with patching the operator with helm upgrade and updating the redis-cluster image.

- New redis-cluster image can ben pushed in the Artifact Registry using the below commands.

```
1
2 docker pull redis:7.x-alpine
3
4 docker tag redis:7.x-alpine-alpine us-east4-docker.pkg.dev/dbce-c360-loyalty-dev-4bcf/oc360-loyalty-dev-artifact-
5 docker push us-east4-docker.pkg.dev/dbce-c360-loyalty-dev-4bcf/oc360-loyalty-dev-artifact-registry/redis:7.x-alpi
6
```

- Finally update the image tag in the redis-failover resource.

```
1 apiVersion: databases.spotahome.com/v1
2 kind: RedisFailover
3 metadata:
4   name: redisfailover
5 spec:
```

```
6  sentinel:
7    replicas: 3
8    image: us-east4-docker.pkg.dev/dbce-c360-loyalty-dev-4bcf/oc360-loyalty-dev-artifact-registry/redis:7.x-alpi
9    resources:
10     requests:
11       cpu: 100m
12       memory: 100Mi
13     limits:
14       cpu: 400m
15       memory: 100Mi
16  redis:
17    replicas: 3
18    image: us-east4-docker.pkg.dev/dbce-c360-loyalty-dev-4bcf/oc360-loyalty-dev-artifact-registry/redis:7.x-alpi
19    resources:
20     requests:
21       cpu: 100m
22       memory: 500Mi
23     limits:
24       cpu: 400m
25       memory: 2000Mi
26  auth:
27    secretPath: redis-auth
```