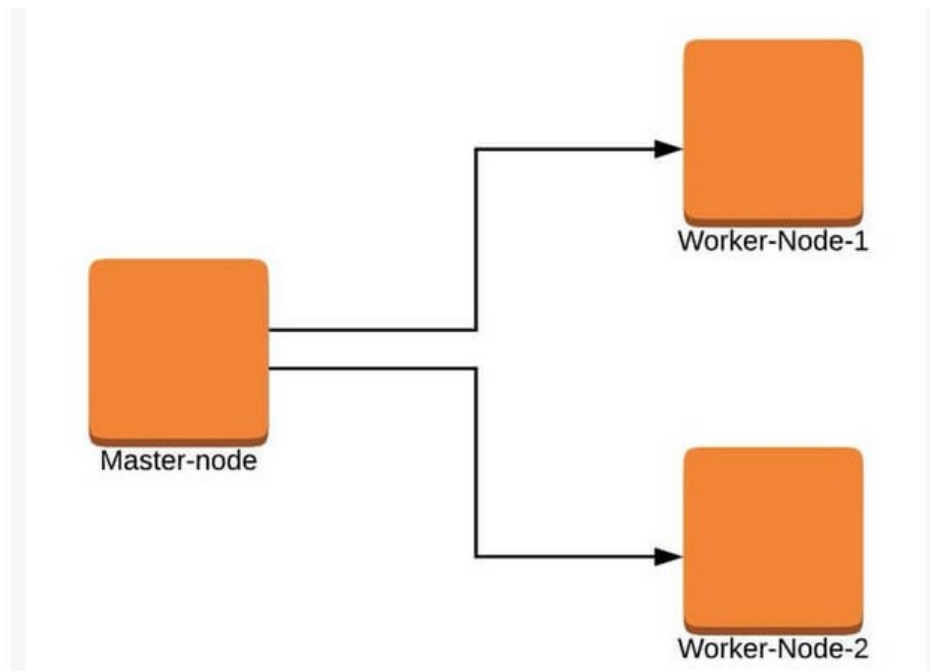


Redis Sentinel Based HA cluster in Kubernetes

For setting up the system we starting to install the necessary requirements we installed three VM with Centos 8 one master and 2 two slaves then we proceed to install docker and kubernetes in all three machines configure the the basic of the operating systems updated the system so at the end we have that works similar to this image:



We followed these tutorials to achieve the desired results:

<https://docs.docker.com/engine/install/centos/>

<https://www.tecmint.com/setup-redis-high-availability-with-sentinel-in-centos-8/>

<https://upcloud.com/community/tutorials/install-kubernetes-cluster-centos-8/>

After have the system prepared we proceed to deploy our Redis cluster to kubernetes:

redis-sentinel-ha-k8s-deployment

We use git clone to clone the following repository that has the deployment of all nodes already automated: <https://github.com/sarweshsuman/redis-sentinel-ha-k8s-deployment.git>

Then following the tutorial <https://sarweshsuman-1.medium.com/deploying-redis-ha-cluster-in-kubernetes-437162337625> we proceed to deploy the redis to kubernetes and here are some images of our own cluster:

```
92K    ../.git/objects
4,0K   ../.git/logs/refs/remotes/origin
4,0K   ../.git/logs/refs/remotes
4,0K   ../.git/logs/refs/heads
8,0K   ../.git/logs/refs
12K    ../.git/logs
196K   ../.git
84K    ../docker
300K   .
[neo@master-node redis-sentinel-ha-k8s-deployment]$ export KUBECONFIG=/etc/kubernetes/kubelet.conf
[neo@master-node redis-sentinel-ha-k8s-deployment]$ export KUBECONFIG=/etc/kubernetes/kubelet.conf
[neo@master-node redis-sentinel-ha-k8s-deployment]$ kubectl apply -f create-service.yaml
error: error loading config file "/etc/kubernetes/kubelet.conf": open /etc/kubernetes/kubelet.conf:
permission denied
[neo@master-node redis-sentinel-ha-k8s-deployment]$ sudo kubectl apply -f create-service.yaml
service/redis-ha-cluster-sentinel-service created
service/redis-ha-cluster-startup-redis-master-service created
[neo@master-node redis-sentinel-ha-k8s-deployment]$
```

```
value: "true"
[root@master-node redis-sentinel-ha-k8s-deployment]# kubectl apply -f create-sentinel-deployment.yaml
deployment.apps/redis-ha-cluster-sentinel-d1 created
[root@master-node redis-sentinel-ha-k8s-deployment]#
```

NAME	STATUS	ROLES	AGE	VERSION
master-node	Ready	control-plane,master	4d5h	v1.20.5
redis-slave1	NotReady	<none>	3d10h	v1.20.5
redis-slave2	NotReady	<none>	3d9h	v1.20.5

```
[root@master-node etc]# _
```

During the installation and configuration of the system we encounter various issues or errors that we solve along the way, the most important was the lack of internet connection when the containers were started researching the matter we discovered that lack of disk space caused this behaviour, increasing it solved the problem.

Virtualbox access credentials:

redis-master1 same for root user:

user: neo

pass: lunes123

redis-slave1 same for root user:

user:neoredis1

pass: lunes123

redis-slave2 same for root user:

user: neo-redis1

pass:lunes123