helm 部署rabbitmq集群

自己制作helm发布

```
cd /root/install-some-apps/rabbit-cluster
```

可以参考下面的内容

官网helm

```
[root@k8s-master01 ~]# helm repo list
NAME          URL
aliyuncs      https://apphub.aliyuncs.com
stable        https://kubernetes.oss-cn-hangzhou.aliyuncs.com/charts
ingress-nginx https://kubernetes.github.io/ingress-nginx
```

查看可使用tabbitmq-ha的版本

```
[root@k8s-master01 ~]# helm search repo rabbitmq-ha
NAME                  CHART VERSION APP VERSION DESCRIPTION

aliyuncs/rabbitmq-ha  1.39.0        3.8.0       Highly available RabbitMQ cluster, the
open sou...
stable/rabbitmq-ha    1.0.0         3.7.3       Highly available RabbitMQ cluster, the
open sou...
[root@k8s-master01 ~]# helm search repo rabbitmq-ha --versions
NAME                  CHART VERSION APP VERSION DESCRIPTION

aliyuncs/rabbitmq-ha  1.39.0        3.8.0       Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.38.2        3.8.0       Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.38.1        3.8.0       Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.36.4        3.8.0       Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.36.3        3.8.0       Highly available RabbitMQ cluster, the
open sou...
```

```
aliyuncs/rabbitmq-ha  1.36.0        3.8.0       Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.34.1        3.7.19      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.34.0        3.7.19      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.33.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.32.4        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.32.3        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.32.2        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.32.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.31.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.30.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.29.1        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.29.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.28.0        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.27.2        3.7.15      Highly available RabbitMQ cluster, the
open sou...
aliyuncs/rabbitmq-ha  1.27.1        3.7.12      Highly available RabbitMQ cluster, the
open sou...
stable/rabbitmq-ha    1.0.0         3.7.3       Highly available RabbitMQ cluster, the
open sou...
stable/rabbitmq-ha    0.1.1         3.7.0       Highly available RabbitMQ cluster, the
open sou...
```

拉取指定版本的配置

```
[root@k8s-master01 ~]# helm pull aliyuncs/rabbitmq-ha --version=1.33.0
[root@k8s-master01 ~]# ls
helm  old  rabbitmq-cluster  rabbitmq-ha-1.33.0.tgz #这个就只拉去的文件，可以解压
```

查询配置文件

```
[root@k8s-master01 ~]# tar -xf rabbitmq-ha-1.33.0.tgz
[root@k8s-master01 ~]# ls
helm  old  rabbitmq-cluster  rabbitmq-ha  rabbitmq-ha-1.33.0.tgz
[root@k8s-master01 ~]# tree rabbitmq-ha
rabbitmq-ha
```

```
├── Chart.yaml
├── OWNERS
├── README.md
├── templates
│   ├── alerts.yaml
│   ├── configmap.yaml
│   ├── _helpers.tpl
│   ├── ingress.yaml
│   ├── NOTES.txt
│   ├── pdb.yaml
│   ├── rolebinding.yaml
│   ├── role.yaml
│   ├── secret.yaml
│   ├── serviceaccount.yaml
│   ├── service-discovery.yaml
│   ├── servicemonitor.yaml
│   ├── service.yaml
│   └── statefulset.yaml
└── values.yaml

1 directory, 18 files
```

参考

```
├── charts # 依赖文件
├── Chart.yaml # 这个chart的版本信息
├── templates #模板
│   ├── deployment.yaml
│   ├── _helpers.tpl # 自定义的模板或者函数
│   ├── ingress.yaml
│   ├── NOTES.txt #这个chart的信息
│   ├── serviceaccount.yaml
│   ├── service.yaml
│   └── tests
│       └── test-connection.yaml
└── values.yaml #配置全局变量或者一些参数
```

创建namespaces

helm指定namespaces，如果没有namespaces空间，就会报错。需要提前创建

```
[root@k8s-master01 ~]# helm create rabbitmq-cluster
Creating rabbitmq-cluster
```

运行rabbitmq集群

```
[root@k8s-master01 rabbitmq-ha]# pwd
/root/rabbitmq-ha
[root@k8s-master01 rabbitmq-ha]# ls
Chart.yaml  OWNERS  README.md  templates  values.yaml
[root@k8s-master01 rabbitmq-ha]# helm install rabbitmq --namespace  rabbitmq-cluster --set ingress.enabled=true,ingress.hostName=rabbitmq.akiraka.net --set rabbitmqUsername=aka,rabbitmqPassword=rabbitmq,managementPassword=rabbitmq,rabbitmqErlangCookie=secretcookie .

NAME: rabbitmq
LAST DEPLOYED: Sun Mar 14 17:25:11 2021
NAMESPACE: rabbitmq-cluster
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
** Please be patient while the chart is being deployed **

  Credentials:

    Username            : aka
    Password            : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-password}" | base64 --decode)
    Management username : management
    Management password : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-management-password}" | base64 --decode)
    ErLang Cookie       : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-erlang-cookie}" | base64 --decode)

  RabbitMQ can be accessed within the cluster on port 5672 at rabbitmq-rabbitmq-ha.rabbitmq-cluster.svc.cluster.local

  To access the cluster externally execute the following commands:

    export POD_NAME=$(kubectl get pods --namespace rabbitmq-cluster -l "app=rabbitmq-ha" -o jsonpath="{.items[0].metadata.name}")
    kubectl port-forward $POD_NAME --namespace rabbitmq-cluster 5672:5672 15672:15672

  To Access the RabbitMQ AMQP port:

    amqp://127.0.0.1:5672/

  To Access the RabbitMQ Management interface:

    URL : http://127.0.0.1:15672
```

查看集群

```
[root@k8s-master01 rabbitmq-ha]# kubectl get svc,pod,ingress -n rabbitmq-cluster
NAME                                       TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)
                     AGE
service/rabbitmq-rabbitmq-ha               ClusterIP   None         <none>
 15672/TCP,5672/TCP,4369/TCP   7m23s
service/rabbitmq-rabbitmq-ha-discovery     ClusterIP   None         <none>
 15672/TCP,5672/TCP,4369/TCP   7m23s

NAME                            READY   STATUS    RESTARTS   AGE
pod/rabbitmq-rabbitmq-ha-0      1/1     Running   0          7m23s
pod/rabbitmq-rabbitmq-ha-1      1/1     Running   0          6m56s
pod/rabbitmq-rabbitmq-ha-2      1/1     Running   0          6m34s

NAME                                         CLASS    HOSTS                   ADDRESS
PORTS   AGE
ingress.extensions/rabbitmq-rabbitmq-ha      <none>   rabbitmq.akiraka.net    10.96.107.62
  80      7m23s
```

补充

```
helm install helm-test2 --set fullnameOverride=aaaaaaa --dry-run .
这个是模拟运行
```

```
删除helm uninstall rabbitmq-cluster -n public-service  # helm v3 --keep-history
  helm delete/del NAME --purge
升级helm upgrade rabbitmq-cluster -n public-service .
```

卸载保留历史记录

```
[root@k8s-master01 rabbitmq-ha]# helm  uninstall rabbitmq -n rabbitmq-cluster --keep-
history
release "rabbitmq" uninstalled
[root@k8s-master01 rabbitmq-ha]# helm list  -n rabbitmq-cluster
NAME  NAMESPACE REVISION  UPDATED STATUS  CHART APP VERSION
[root@k8s-master01 rabbitmq-ha]# helm list
NAME  NAMESPACE REVISION  UPDATED STATUS  CHART APP VERSION
[root@k8s-master01 rabbitmq-ha]# helm  ls
NAME  NAMESPACE REVISION  UPDATED STATUS  CHART APP VERSION
[root@k8s-master01 rabbitmq-ha]#  helm status rabbitmq -n rabbitmq-cluster
NAME: rabbitmq
```

```
LAST DEPLOYED: Sun Mar 14 17:25:11 2021
NAMESPACE: rabbitmq-cluster
STATUS: uninstalled
REVISION: 1
TEST SUITE: None
NOTES:
** Please be patient while the chart is being deployed **

  Credentials:

    Username            : aka
    Password            : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-password}" | base64 --decode)
    Management username : management
    Management password : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-management-password}" | base64 --decode)
    ErLang Cookie       : $(kubectl get secret --namespace rabbitmq-cluster rabbitmq-rabbitmq-ha -o jsonpath="{.data.rabbitmq-erlang-cookie}" | base64 --decode)

  RabbitMQ can be accessed within the cluster on port 5672 at rabbitmq-rabbitmq-ha.rabbitmq-cluster.svc.cluster.local

  To access the cluster externally execute the following commands:

    export POD_NAME=$(kubectl get pods --namespace rabbitmq-cluster -l "app=rabbitmq-ha" -o jsonpath="{.items[0].metadata.name}")
    kubectl port-forward $POD_NAME --namespace rabbitmq-cluster 5672:5672 15672:15672

  To Access the RabbitMQ AMQP port:

    amqp://127.0.0.1:5672/

  To Access the RabbitMQ Management interface:

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