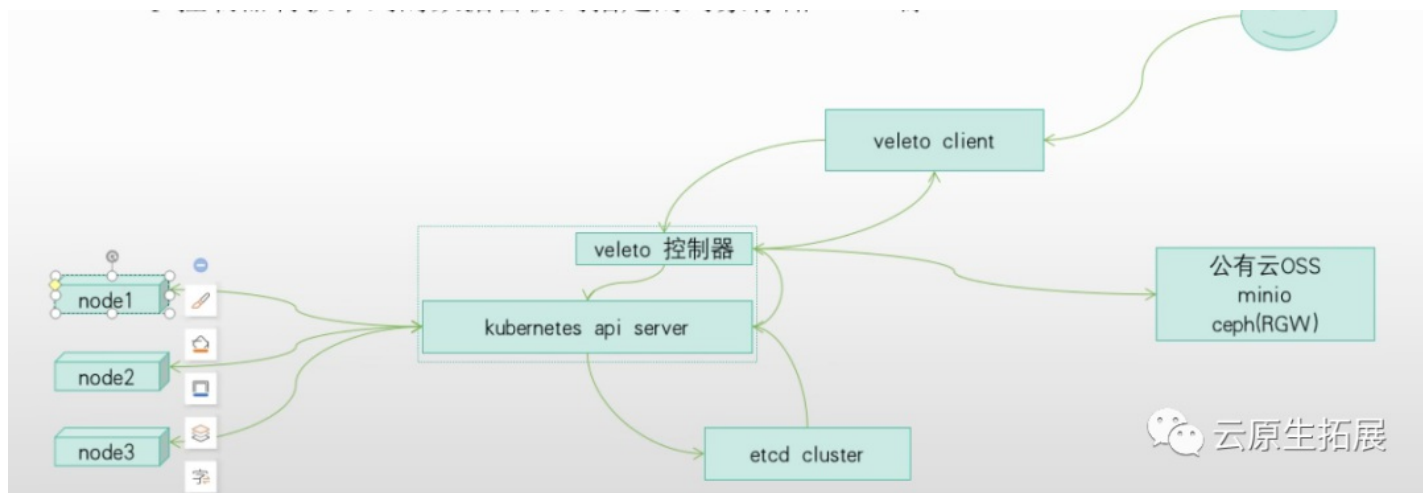


Kubernetes 系列（二十五）基于 velero & MinIO 对 kubernetes 进行备份和恢复

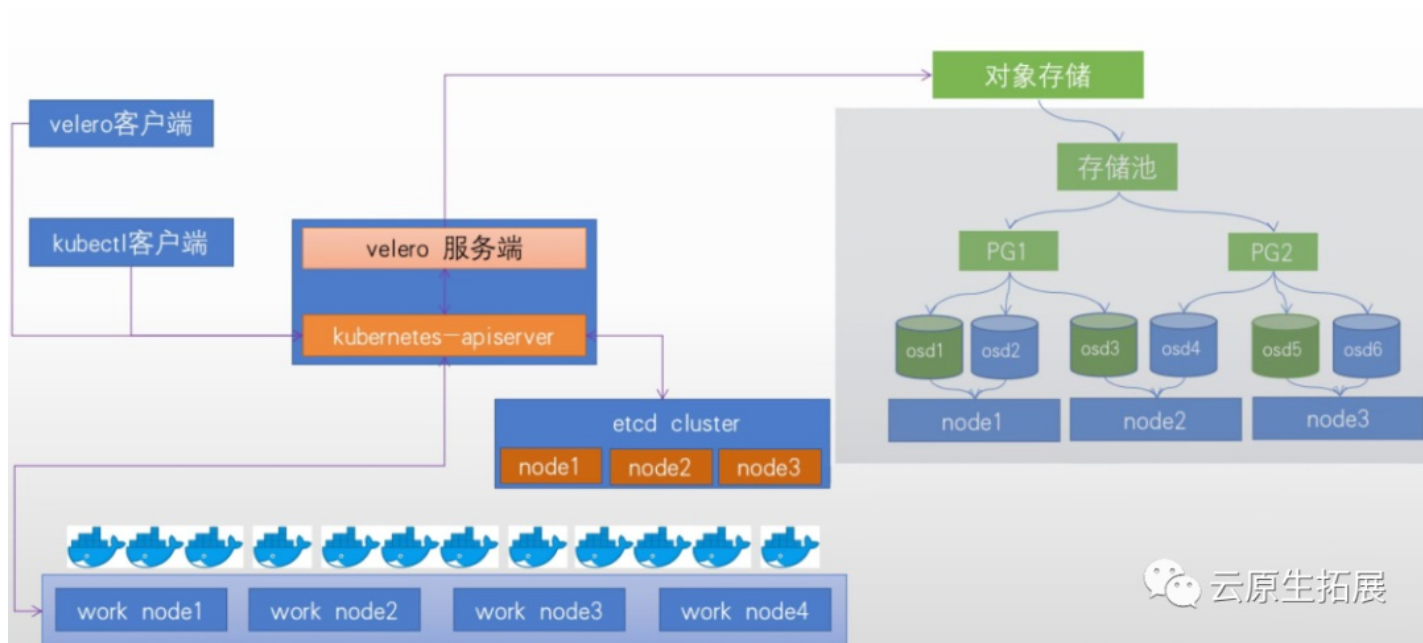
Velero 介绍

Velero 是由vmware公司团队研发开源工具，用于安全地备份、恢复和迁移 Kubernetes 集群和持久卷。它可以在本地和公共云中运行。Velero 由一个在您的 Kubernetes 集群中作为部署运行的服务器进程和一个命令行界面 (CLI) 组成，DevOps 团队和平台操作员可通过该界面配置计划备份、触发临时备份、执行恢复等。官网地址：<https://velero.io/>

Velero备份流程:



整体架构:



准备 MinIO 存储环境

安装 MinIO

```

docker pull minio/minio:latest
docker run -p 9000:9000 -p 9090:9090 \
--net=host \
--name minio \
-d --restart=always \
-e "MINIO_ACCESS_KEY=admin" \
-e "MINIO_SECRET_KEY=minio123" \
-v /home/minio/data:/data \
-v /home/minio/config:/root/.minio \
minio/minio server \
/data --console-address ":9090" -address ":9000"
[root@easzlab-minio-01 ~]# netstat -tnlp
Active Internet connections (only servers)

```

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State	PID/Program name
tcp	0	0	127.0.0.1:40963	0.0.0.0:*	LISTEN	737/containerd
tcp	0	0	127.0.0.53:53	0.0.0.0:*	LISTEN	669/systemd-resolve
tcp	0	0	0.0.0.0:22	0.0.0.0:*	LISTEN	830/sshd: /usr/sbin
tcp	0	0	127.0.0.1:6010	0.0.0.0:*	LISTEN	1437/sshd: root@pts
tcp6	0	0	:::9000	:::*	LISTEN	5020/minio
tcp6	0	0	:::22	:::*	LISTEN	830/sshd: /usr/sbin
tcp6	0	0	:::1:6010	:::*	LISTEN	1437/sshd: root@pts
tcp6	0	0	:::9090	:::*	LISTEN	5020/minio

```

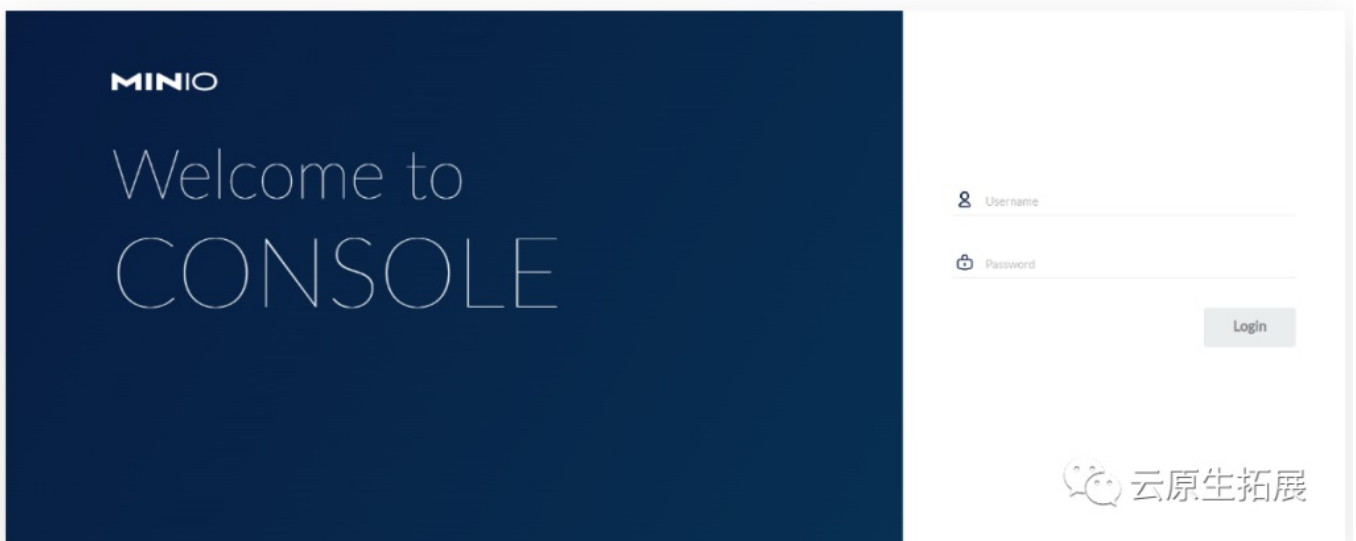
[root@easzlab-minio-01 ~]#

```

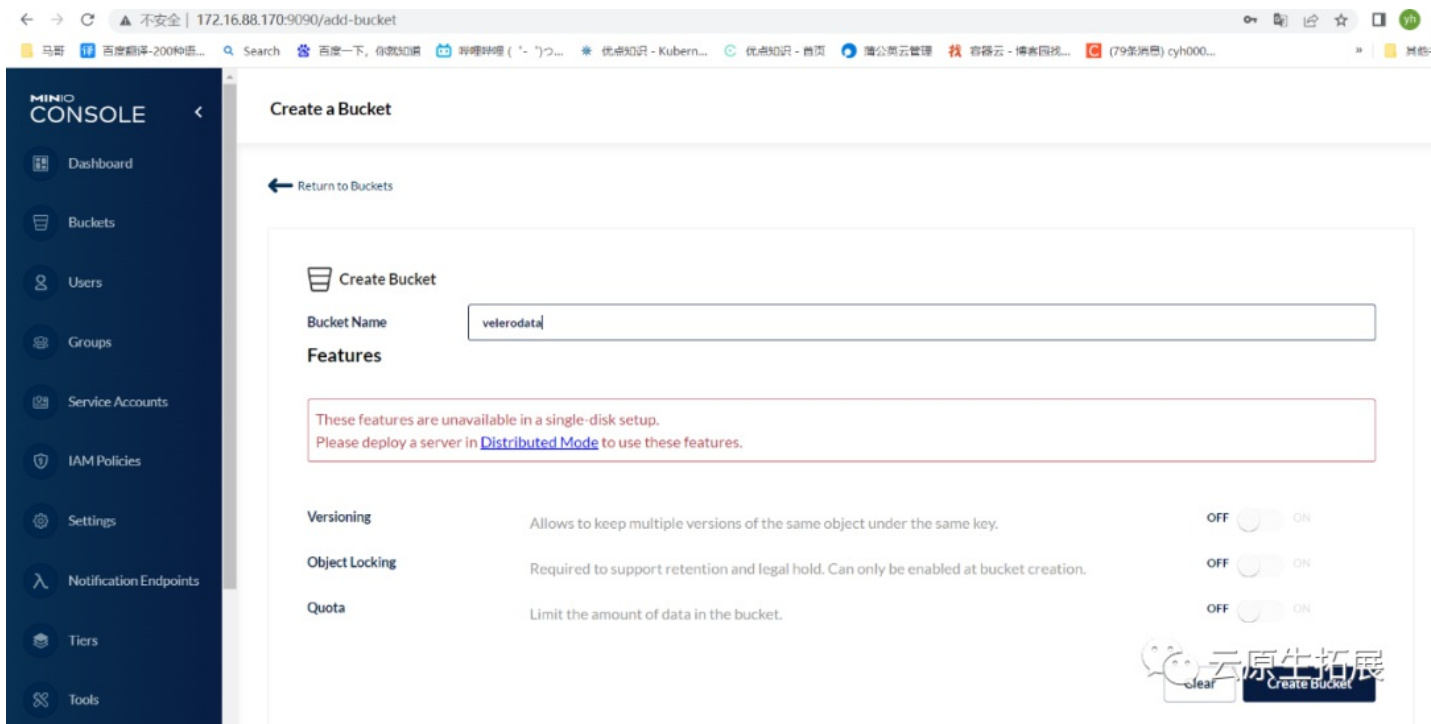
admin minio123

← → ↻ 不安全 | 172.16.88.170:9090/login

马哥 百度翻译-200种语... Search 百度一下, 你就知道 哔哩哔哩 (゜-゜)つ... 优点知识 - Kubern... 优点知识 - 首页 蒲公英云管理 容格云 - 博客园找... (79条消息) cyh000...



| 创建 velero data buckets



在master-01节点部署velero

下载安装包

```
wget https://github.com/vmware-tanzu/velero/releases/download/v1.8.1/velero-v1.8.1-linux-amd64.tar.gz
tar -xvzf velero-v1.8.1-linux-amd64.tar.gz
mv velero /usr/local/bin
```

```
root@easzlab-k8s-master-01:~# velero version
Client:
```

```
Version: v1.8.1
```

```
Git commit: 18ee078dff9345df610e0ca9f61b31124e93f50
```

```
<error getting server version: no matches for kind "ServerStatusRequest" in version "v1.8.1"
root@easzlab-k8s-master-01:~#
```

云原生拓展

配置 velero 认证环境

```
mkdir /data/velero -p
cd /data/velero
root@easzlab-k8s-master-01:/data/velero# cat velero-auth.txt
[default]
aws_access_key_id = admin
aws_secret_access_key = minio123
```

将 velero 安装到 K8s 集群

```
root@easzlab-k8s-master-01:/data/velero# kubectl create ns velero-system
namespace/velero-system created
root@easzlab-k8s-master-01:/data/velero# velero --kubeconfig /root/.kube/config \
> install \
> --provider aws \
> --plugins velero/velero-plugin-for-aws:v1.3.1 \
> --bucket velerodata \
> --secret-file ./velero-auth.txt \
> --use-volume-snapshots=false \
> --namespace velero-system \
> --backup-location-config region=minio,s3ForcePathStyle="true",s3Url=http://172.16.88.170:9000
CustomResourceDefinition/backups.velero.io: attempting to create resource
CustomResourceDefinition/backups.velero.io: attempting to create resource client
CustomResourceDefinition/backups.velero.io: resource created
```

```
CustomResourceDefinition/backups.velero.io: created
CustomResourceDefinition/backupstoragelocations.velero.io: attempting to create resource
CustomResourceDefinition/backupstoragelocations.velero.io: attempting to create resource client
CustomResourceDefinition/backupstoragelocations.velero.io: created
CustomResourceDefinition/deletebackuprequests.velero.io: attempting to create resource
CustomResourceDefinition/deletebackuprequests.velero.io: attempting to create resource client
CustomResourceDefinition/deletebackuprequests.velero.io: created
CustomResourceDefinition/downloadrequests.velero.io: attempting to create resource
CustomResourceDefinition/downloadrequests.velero.io: attempting to create resource client
CustomResourceDefinition/downloadrequests.velero.io: created
CustomResourceDefinition/podvolumebackups.velero.io: attempting to create resource
CustomResourceDefinition/podvolumebackups.velero.io: attempting to create resource client
CustomResourceDefinition/podvolumebackups.velero.io: created
CustomResourceDefinition/podvolumerestores.velero.io: attempting to create resource
CustomResourceDefinition/podvolumerestores.velero.io: attempting to create resource client
CustomResourceDefinition/podvolumerestores.velero.io: created
CustomResourceDefinition/resticrepositories.velero.io: attempting to create resource
CustomResourceDefinition/resticrepositories.velero.io: attempting to create resource client
CustomResourceDefinition/resticrepositories.velero.io: created
CustomResourceDefinition/restores.velero.io: attempting to create resource
CustomResourceDefinition/restores.velero.io: attempting to create resource client
CustomResourceDefinition/restores.velero.io: created
CustomResourceDefinition/schedules.velero.io: attempting to create resource
CustomResourceDefinition/schedules.velero.io: attempting to create resource client
CustomResourceDefinition/schedules.velero.io: created
CustomResourceDefinition/serverstatusrequests.velero.io: attempting to create resource
CustomResourceDefinition/serverstatusrequests.velero.io: attempting to create resource client
CustomResourceDefinition/serverstatusrequests.velero.io: created
CustomResourceDefinition/volumesnapshotlocations.velero.io: attempting to create resource
CustomResourceDefinition/volumesnapshotlocations.velero.io: attempting to create resource client
CustomResourceDefinition/volumesnapshotlocations.velero.io: created
Waiting for resources to be ready in cluster...
Namespace/velero-system: attempting to create resource
Namespace/velero-system: attempting to create resource client
Namespace/velero-system: already exists, proceeding
Namespace/velero-system: created
ClusterRoleBinding/velero-velero-system: attempting to create resource
ClusterRoleBinding/velero-velero-system: attempting to create resource client
ClusterRoleBinding/velero-velero-system: created
ServiceAccount/velero: attempting to create resource
ServiceAccount/velero: attempting to create resource client
ServiceAccount/velero: created
Secret/cloud-credentials: attempting to create resource
Secret/cloud-credentials: attempting to create resource client
Secret/cloud-credentials: created
BackupStorageLocation/default: attempting to create resource
BackupStorageLocation/default: attempting to create resource client
BackupStorageLocation/default: created
Deployment/velero: attempting to create resource
Deployment/velero: attempting to create resource client
Deployment/velero: created
Velero is installed! ☑ Use 'kubectl logs deployment/velero -n velero-system' to view the status.
root@easzlab-k8s-master-01:/data/velero#
```

```
root@easzlab-k8s-master-01:/data/velero# kubectl get pod -A
```

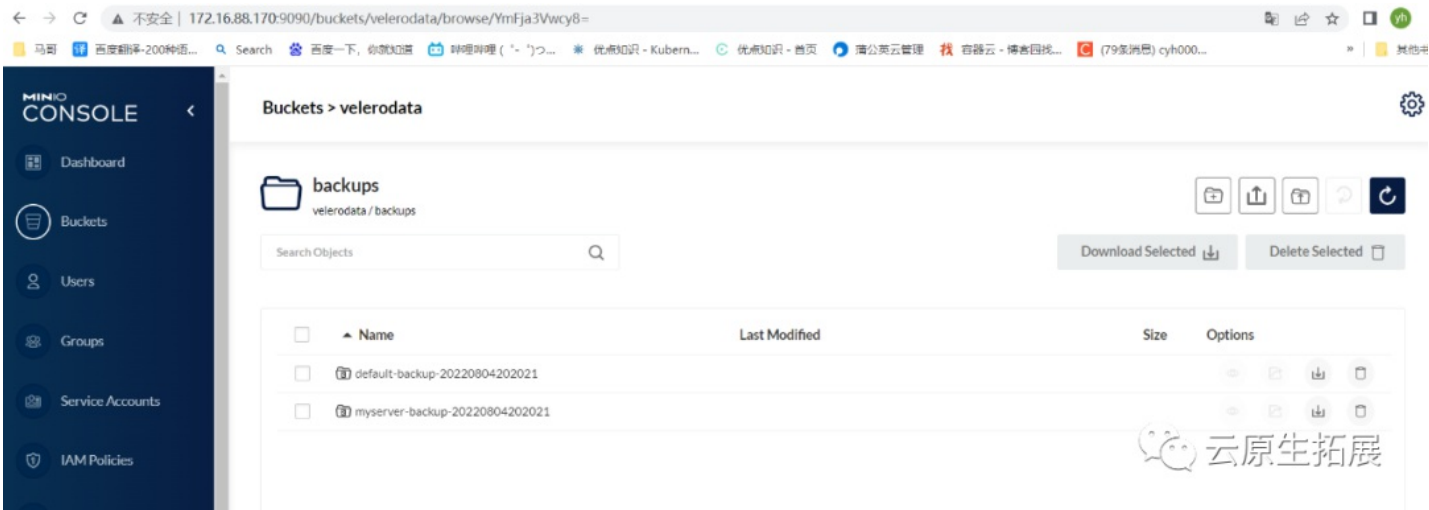
NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-8l78t	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-9b75m	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-k75jh	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d7h ago)	6d18h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d7h ago)	6d6h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d7h ago)	6d6h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d7h ago)	6d6h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d7h ago)	6d6h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdc9f-58l12	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdc9f-6xcjk	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdc9f-cxg5m	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdc9f-gv2gk	1/1	Running	1 (2d7h ago)	4d7h
velero-system	velero-858b9459f9-c7qc9	1/1	Running	0	2m29s

```
root@easzlab-k8s-master-01:/data/velero#
```

测试备份功能

```
root@easzlab-k8s-master-01:~# DATE=`date +%Y%m%d%H%M%S`
root@easzlab-k8s-master-01:~# velero backup create default-backup-${DATE} --include-cluster-resources=true --include-namespaces k
Backup request "default-backup-20220804202021" submitted successfully.
Run `velero backup describe default-backup-20220804202021` or `velero backup logs default-backup-20220804202021` for more details.
root@easzlab-k8s-master-01:~#
root@easzlab-k8s-master-01:~# velero backup create myserver-backup-${DATE} --include-cluster-resources=true --include-namespaces my
Backup request "myserver-backup-20220804202021" submitted successfully.
Run `velero backup describe myserver-backup-20220804202021` or `velero backup logs myserver-backup-20220804202021` for more detail
root@easzlab-k8s-master-01:~#
```

检查是否备份成功



使用脚本备份

```
root@easzlab-k8s-master-01:~# cat velero-k8s-backup.sh
#!/bin/bash
NS_NAME=$(kubectl get ns |awk '{if(NR>1){print $1}}')
DATE=$(date +%Y%m%d%H%M%S)
cd /data/velero/

for i in $NS_NAME;do
    velero backup create ${i}-ns-backup-${DATE} \
    --include-cluster-resources=true \
    --include-namespaces ${i} \
    --kubeconfig=/root/.kube/config \
    --namespace velero-system
done

root@easzlab-k8s-master-01:~#
root@easzlab-k8s-master-01:~# bash velero-k8s-backup.sh
Backup request "default-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe default-ns-backup-20220805165331` or `velero backup logs default-ns-backup-20220805165331` for more details.
Backup request "kube-node-lease-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe kube-node-lease-ns-backup-20220805165331` or `velero backup logs kube-node-lease-ns-backup-20220805165331` for more details.
Backup request "kube-public-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe kube-public-ns-backup-20220805165331` or `velero backup logs kube-public-ns-backup-20220805165331` for more details.
Backup request "kube-system-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe kube-system-ns-backup-20220805165331` or `velero backup logs kube-system-ns-backup-20220805165331` for more details.
Backup request "kubernetes-dashboard-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe kubernetes-dashboard-ns-backup-20220805165331` or `velero backup logs kubernetes-dashboard-ns-backup-20220805165331` for more details.
Backup request "linux70-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe linux70-ns-backup-20220805165331` or `velero backup logs linux70-ns-backup-20220805165331` for more details.
Backup request "myserver-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe myserver-ns-backup-20220805165331` or `velero backup logs myserver-ns-backup-20220805165331` for more details.
Backup request "velero-system-ns-backup-20220805165331" submitted successfully.
Run `velero backup describe velero-system-ns-backup-20220805165331` or `velero backup logs velero-system-ns-backup-20220805165331` for more details.
root@easzlab-k8s-master-01:~#
```

← → ↺ 不安全 | 172.16.88.170:9090/buckets/velerodata/browse/Ymfja3Vwcy8=

🔍 Search 百度一下, 你就知道 哔哩哔哩 (゜-゜)つ... 优酷知识 - Kubern... 优酷知识 - 首页 蒲公英云管理 容器云 - 博客园线... (79条消息) cyh000...

MINIO

CONSOLE

Dashboard

Buckets

Users

Groups

Service Accounts

IAM Policies

Settings

Notification Endpoints

Tiers

Tools

Buckets > velerodata

backups

velerodata / backups

Search Objects

Download Selected

Delete Selected

<input type="checkbox"/>	Name	Last Modified	Size	Options
<input type="checkbox"/>	default-backup-20220804202021			
<input type="checkbox"/>	default-ns-backup-20220805165331			
<input type="checkbox"/>	kube-node-lease-ns-backup-20220805165331			
<input type="checkbox"/>	kube-public-ns-backup-20220805165331			
<input type="checkbox"/>	kube-system-ns-backup-20220805165331			
<input type="checkbox"/>	kubernetes-dashboard-ns-backup-20220805165331			
<input type="checkbox"/>	linux70-ns-backup-20220805165331			
<input type="checkbox"/>	myserver-backup-20220804202021			
<input type="checkbox"/>	myserver-ns-backup-20220805165331			

恢复备份测试

删除备份 pod



```
root@easzlab-deploy:~/pod-test# kubectl get pod -A
```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-8l78t	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-9b75m	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-k75jh	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d10h ago)	6d21h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d10h ago)	6d9h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d10h ago)	6d9h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-58l12	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-6xcjk	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-cxg5m	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-gv2gk	1/1	Running	1 (2d10h ago)	4d10h
velero-system	velero-858b9459f9-5mxxx	1/1	Running	0	23m

```
root@easzlab-deploy:~/pod-test# kubectl delete -f nginx.yaml
```

```
deployment.apps "linux70-nginx-deployment" deleted
```

```
service "linux70-nginx-service" deleted
```

```
root@easzlab-deploy:~/pod-test# kubectl get pod -A
```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-8l78t	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-9b75m	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-k75jh	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d10h ago)	6d21h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d10h ago)	6d9h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d10h ago)	6d9h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d10h ago)	4d10h
velero-system	velero-858b9459f9-5mxxx	1/1	Running	0	24m

```
root@easzlab-deploy:~/pod-test#
```

使用备份数据进行恢复


```

root@easzlab-k8s-master-01:~# velero restore create --from-backup myserver-backup-20220804202021 --wait --kubeconfig=/root/.kube/c
Restore request "myserver-backup-20220804202021-20220804203424" submitted successfully.
Waiting for restore to complete. You may safely press ctrl-c to stop waiting - your restore will continue in the background.
.....
Restore completed with status: Completed. You may check for more information using the commands `velero restore describe myserver-
root@easzlab-k8s-master-01:~# kubectl get pod -A

```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-8l78t	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-9b75m	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-k75jh	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d10h ago)	6d21h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d10h ago)	6d9h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d10h ago)	6d9h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-58l12	0/1	ContainerCreating	0	36s
myserver	linux70-nginx-deployment-55dc5fdcf9-6xcjk	1/1	Running	0	36s
myserver	linux70-nginx-deployment-55dc5fdcf9-cxg5m	0/1	ContainerCreating	0	36s
myserver	linux70-nginx-deployment-55dc5fdcf9-gv2gk	1/1	Running	0	36s
velero-system	velero-858b9459f9-5mxxx	1/1	Running	0	25m

```

root@easzlab-k8s-master-01:~# kubectl get pod -A

```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-8l78t	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-9b75m	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-k75jh	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d10h ago)	6d21h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d10h ago)	6d21h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d10h ago)	6d9h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d10h ago)	6d9h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d10h ago)	6d9h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d10h ago)	4d10h
myserver	linux70-nginx-deployment-55dc5fdcf9-58l12	1/1	Running	0	2m6s
myserver	linux70-nginx-deployment-55dc5fdcf9-6xcjk	1/1	Running	0	2m6s
myserver	linux70-nginx-deployment-55dc5fdcf9-cxg5m	1/1	Running	0	2m6s
myserver	linux70-nginx-deployment-55dc5fdcf9-gv2gk	1/1	Running	0	2m6s
velero-system	velero-858b9459f9-5mxxx	1/1	Running	0	27m

```

root@easzlab-k8s-master-01:~#

```

卸载安装


```

root@easzlab-k8s-master-01:~# kubectl get pod -A

```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-8l78t	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-9b75m	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-k75jh	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d7h ago)	6d18h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d7h ago)	6d18h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d7h ago)	6d7h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d7h ago)	6d7h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d7h ago)	6d7h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d7h ago)	6d7h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdcf9-58l12	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdcf9-6xcjk	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdcf9-cxg5m	1/1	Running	1 (2d7h ago)	4d7h
myserver	linux70-nginx-deployment-55dc5fdcf9-gv2gk	1/1	Running	1 (2d7h ago)	4d7h
velero-system	velero-858b9459f9-c7qc9	1/1	Running	0	15m

```

root@easzlab-k8s-master-01:~#
root@easzlab-k8s-master-01:~# velero --kubeconfig /root/.kube/config uninstall --namespace velero-system
You are about to uninstall Velero.
Are you sure you want to continue (Y/N)? y
Waiting for velero namespace "velero-system" to be deleted
.....
Velero namespace "velero-system" deleted
Velero uninstalled 🎉
root@easzlab-k8s-master-01:~# kubectl get pod -A

```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	calico-kube-controllers-5c8bb696bb-fxbmr	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-2qtfm	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-8l78t	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-9b75m	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-k75jh	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-kmbhs	1/1	Running	1 (2d9h ago)	6d21h
kube-system	calico-node-lxfk9	1/1	Running	1 (2d9h ago)	6d21h
kube-system	coredns-69548bdd5f-6df7j	1/1	Running	1 (2d9h ago)	6d9h
kube-system	coredns-69548bdd5f-nl5qc	1/1	Running	1 (2d9h ago)	6d9h
kubernetes-dashboard	dashboard-metrics-scraper-8c47d4b5d-2d275	1/1	Running	1 (2d9h ago)	6d9h
kubernetes-dashboard	kubernetes-dashboard-5676d8b865-6l8n8	1/1	Running	1 (2d9h ago)	6d9h
linux70	linux70-tomcat-app1-deployment-5d666575cc-kbjhk	1/1	Running	1 (2d9h ago)	4d9h
myserver	linux70-nginx-deployment-55dc5fdcf9-58l12	1/1	Running	1 (2d9h ago)	4d9h
myserver	linux70-nginx-deployment-55dc5fdcf9-6xcjk	1/1	Running	1 (2d9h ago)	4d9h
myserver	linux70-nginx-deployment-55dc5fdcf9-cxg5m	1/1	Running	1 (2d9h ago)	4d9h
myserver	linux70-nginx-deployment-55dc5fdcf9-gv2gk	1/1	Running	1 (2d9h ago)	4d9h

```

root@easzlab-k8s-master-01:~#

```

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