emptyDir Volume

Concept

Objectives

Concept

    a.   emptyDir

Review Demo

    a.   Manifest file

    b.   Create and display

    c.   Test usecases

    d.   Clean up

Demo

emptyDir

- Creates empty directory first created when a Pod is assigned to a Node

- Stays as long as pod is running

- Once pod is removed from a node, emptyDir is deleted forever

Use cases:

- Temporary space.

Review
Demo

a.   Manifest file

b.   Create DaemonSet

d.   Display & Validate

e.   Clean up

```yaml
# test-ed.yaml
apiVersion: v1
kind: Pod
metadata:
  name: test-ed
spec:
  containers:
  - image: k8s.gcr.io/test-webserver
    name: test-container
    volumeMounts:
    - name: cache-volume
      mountPath: /cache
  volumes:
  - name: cache-volume
    emptyDir: {}
```

emptyDir – Create & Display

```
[srinath@master ~]$ kubectl create -f test-ed.yaml
pod/test-ed created
```

```
[srinath@master ~]$ kubectl get po
NAME            READY       STATUS      RESTARTS    AGE
test-ed         1/1         Running     0           49s
```

```
[srinath@master ~]$ kubectl exec test-ed df /cache
Filesystem      1K-blocks       Used Available Use% Mounted on
/dev/sda1       10474496 5389664    5084832  52% /cache
```

srinathchalla@outlook.com

emptyDir – Describe

```
[srinath@master ~]$   kubectl describe pod test-ed
Name:                 test-ed
Namespace:            default
Priority:             0
PriorityClassName:    <none>
Node:                 node2/10.128.0.7
Start Time:           Thu, 30 Aug 2018 13:39:17 +0000
Labels:               <none>
Annotations:          <none>
Status:               Running
IP:                   10.240.2.162
Containers:
  redis-container:
    Container ID:     docker://bb2c13c35729e303428e30fe4aa06e724d1b9ef78677187af41082d763aab705
    Image:            redis
    ...
    Mounts:
      /cache from cache-volume (rw)
      /var/run/secrets/kubernetes.io/serviceaccount from default-token-mdxv9 (ro)
    ...
Volumes:
  cache-volume:
    Type:     EmptyDir (a temporary directory that shares a pod's lifetime)
    ...
```

srinathchalla@outlook.com

emptyDir – Delete

```
[srinath@master ~]$      kubectl delete po test-ed
 pod "test-ed" deleted
```

Objectives

Concept

    a.   emptyDir

Review Demo

    a.   Manifest file

    b.   Create and display

    c.   Test usecases

    d.   Clean up

srinathchalla@outlook.com

Coming up...

Demo
emptyDir