Volume

Volume Inspect

```
docker volume inspect data_volume
```

```
[
    {
        "CreatedAt": "2020-01-20T19:52:34Z",
        "Driver": "local",
        "Labels": {},
        "Mountpoint": "/var/lib/docker/volumes/data_volume/_data",
        "Name": "data_volume",
        "Options": {},
        "Scope": "local"
    }
]
```

Volume Removal: rm and prune

```
docker volume remove data_volume
```

```
Error response from daemon: remove data_volume: volume is in use -
[2be4d91822964882504a31992aac9dd0b228c03f8739b1afe74984aae6409620]
```

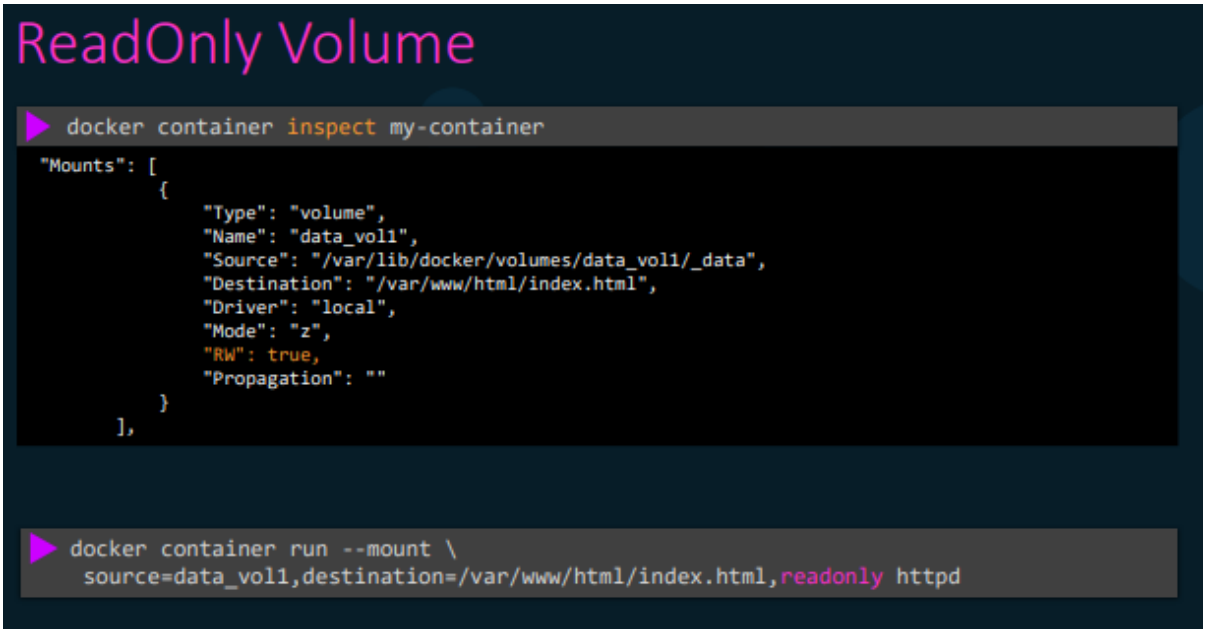
```
docker volume remove data_volume
```

```
data_volume
```

```
docker volume prune
```

```
WARNING! This will remove all local volumes not used by at least one container.
Are you sure you want to continue? [y/N] y
Deleted Volumes:
data_vol3
data_vol1
data_vol2

Total reclaimed space: 12MB
```



Lab:

crate a volume name testvol-1

create a container with this testvol-1

create another container with this volume but give only read permission

delete the volume but before need to delete the container

create a folder

create a container and mount this folder

create another container and share the same folder

```
#docker volume create testvol-1
#docker volume ls
#docker container run -itd --name=test -v testvol-1:/rajiv centos:7
#docker container ls -l
#docker exec -it test /bin/bash
#dh -h

create 2 files in this location
#cd /rajiv
#echo rajiv > a.txt
#echo siddiqui > b.txt

now stop and delete the container
#docker container stop container-id
#docker container rm container-id

#docker volume ls
#docker volume inspect testvol-1
#cd /var/lib/docker/volumes/testvol-1/_data
#sudo ls -lrt /var/lib/docker/volumes/testvol-1/_data

Crate another container with this volume
#docker container run -itd --name=testagain --mount source=testvol-1,destination=/rajiv centos:7

#docker ps
#docker exec -it 6e86 /bin/bash
#exit
#docker volume remove testvol-1
#docker ps
#docker stop 6e c7
#docker container rm 6e c7
#docker volume remove testvol-1
#docker volume ls
#docker voume prune
```

```
#docker volume prune
#docker volume ls
#docker volume rm d5c8d93ac94be4b69d82e0e31372b1e688ebd426f3f56fa1f469124d62dbac34
#docker volume ls
#docker volume prune
#docker volume create vol-1

#docker container run -itd --name=readonly --mount source=vol-1,destination=/rajiv,readonly centos:7

#dcoker ps
#docker ps
#docker container inspect e12
#pwd
```

Bind mount:

```
#mkdir /data
#sudo mkdir /data
#ls /data
#docker container run -itd --name=read-1 --mount type=bind,source=/data,destination=/rajiv centos:7
#docker container exec -it read-1 /bin/bash
#df -h
#cd /rajiv
#echo "rajiv" >r.txt
#ll
#exit
#cd /data
#ll

Now we create another container use the same volume /data
#docker container run -itd --name=read-2 --mount type=bind,source=/data,destination=/rajiv centos:7
#docker container exec -it read-2 /bin/bash
#df -h
#cd /rajiv
#echo "siddiqui" >s.txt
#ll
#exit
#cd /data
#ll
Now we can see both r.txt and s.txt file is showing.
```

Delete the volume

```
#docker volume remove testvol-1
```

We can also search in mount by following command

```
#df -h | grep -i /rajiv
```