

Docker Hands-on:3

Question:How to recover the container if we delete it by mistake

Here we use the Docker volume

whenever we remove the container all will get deleted permanently but if we really want to save the data then we need to add another external drive. So, that whenever we delete the container we will have the data backed up in the other external drive

what is docker volumes?

It helps to attach an external storage to containers

It also helps to make the data persistent

To check docker volumes:

`docker volume ls`

`docker volume create applogs` (instead of applogs we can write anything we want)

`docker volume ls`

`docker volume inspect applogs` (this will show some path where this file save in `/var/lib/docker/volumes/applogs` instead of `/var/lib/docker/container/volumes/applogs` which is good to secure the data)

can we add this path in the running container?

No

We only can attach the volume in the container when we are creating the container

Here our goal is to make the particular folder safe and attach on the other docker volume.

Step1:We need to remove the running container to add the docker volume

`Docker container rm -f container_ID`

If we have any doubt like if we remove it how we can run so for also we can test to run the container with the below command:

Ex:`Docker container run -d -P nginx:latest`

Step2:check and take the confirmation that container is running or not..

Step3:Run the below command to add the docker volume :

Ex: docker container run -d -P --mount type=volume,src=applogs,target=/opt/tomcat/logs
harshit407/cizaar:v1

OR

docker container run -d -P --volume applogs:/opt/tomcat/logs harshit407/cizaar:v1

Here "src" is the folder which we created

"Target" is path where file exist from where we need to attach

root@ip-172-31-8-163:~# docker volume inspect applogs

```
[
  {
    "CreatedAt": "2024-04-03T13:36:21Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/applogs/_data",
    "Name": "applogs",
    "Options": null,
    "Scope": "local"
  }
]
```

In the above output we can see the mountpoint and name

So, the mountpoint refers to the src where it will help for the path means applogs path is the destination and target is the source.

So now if we remove the container then we can't lose the data

Data is still available in the path: /var/lib/docker/volumes/applogs/_data

Which is called the docker volume.

=====

Can we create the multiple volume to a single container? yes

Can we create the single volume with multiple container? Yes

In the real world scenario generally company use the other volume or backup system like NFS or dell EMC networker to save the data in external side.