

## Lab: Docker Volumes

```
root@myVM: ~  
DRIVER      VOLUME NAME  
local       27694a21cdaaa032e3ac49a77248e6d14b419b1cc60b4d80fdea3b41  
d3052b9f  
local       my-vol  
root@myVM:~# docker volume inspect my-vol  
[  
  {  
    "CreatedAt": "2024-08-14T11:02:24Z",  
    "Driver": "local",  
    "Labels": null,  
    "Mountpoint": "/var/lib/docker/volumes/my-vol/_data",  
    "Name": "my-vol",  
    "Options": null,  
    "Scope": "local"  
  }  
]  
root@myVM:~# docker volume rm my-vol  
my-vol  
root@myVM:~# docker container run --name devtest -dit -v myvol2:/a  
pp nginx:latest  
  
Unable to find image 'nginx:latest' locally  
latest: Pulling from library/nginx  
e4fff0779e6d: Pull complete  
9c4e4e507b08: Pull complete  
85664e7b25d6: Pull complete  
e9d00ba15cc0: Pull complete  
ca3474dd2ca6: Pull complete  
472851929ad7: Pull complete  
ed60582f2661: Pull complete  
Digest: sha256:98f8ec75657d21b924fe4f69b6b9bfff2f6550ea48838af479d8  
894a852000e40  
Status: Downloaded newer image for nginx:latest  
3f699ba5865a66f1d2f4abd2e93ab66e21925d6ab26bba8090ea45c7f8a29ce1  
root@myVM:~# docker inspect devtest | grep "Mounts" -A 10  
    "Mounts": [  
      {  
        "Type": "volume",  
        "Name": "myvol2",
```

```
        "Type": "volume",  
        "Name": "myvol2",  
        "Source": "/var/lib/docker/volumes/myvol2/_data",  
        "Destination": "/app",  
        "Driver": "local",  
        "Mode": "z",  
        "RW": true,  
        "Propagation": ""  
      }  
    ]  
  }  
]  
root@myVM:~# docker container stop devtest  
devtest  
root@myVM:~# docker container rm devtest  
devtest  
root@myVM:~# docker volume rm myvol2  
myvol2  
root@myVM:~# docker container run --name nginxtest -dit -v nginx-v  
ol:/usr/share/nginx/html nginx:latest  
80a4943b60dec3ad066495c64243e34e5f42dd214ad834e7a3048cea7d09417d  
root@myVM:~# cat > /var/lib/docker/volumes/nginx-vol/_data/index.h  
tml <<  
EOF  
"HELLO FROM DOCKER"  
EOF  
-bash: syntax error near unexpected token `newline'  
EOF: command not found  
HELLO FROM DOCKER: command not found  
EOF: command not found  
root@myVM:~# cat > /var/lib/docker/volumes/nginx-vol/_data/index.h  
tml <<EOF  
HELLO FROM DOCKER  
EOF  
root@myVM:~# docker container inspect nginxtest | grep -i ipaddress  
s  
    "SecondaryIPAddresses": null,  
    "IPAddress": "172.17.0.2",  
    "IPAddress": "172.17.0.2",  
root@myVM:~# curl 172.17.0.2  
HELLO FROM DOCKER  
root@myVM:~# docker container stop nginxtest
```

```
root@myVM: ~
HELLO FROM DOCKER
root@myVM:~# docker container stop nginxtest
nginxtest
root@myVM:~# docker container rm nginxtest
nginxtest
root@myVM:~# cat /var/lib/docker/volumes/nginx-vol/_data/index.htm
1
HELLO FROM DOCKER
root@myVM:~# docker volume rm nginx-vol
nginx-vol
root@myVM:~# docker container run --name nginxtest -dit -v nginx-vol:/usr/share/nginx/html:ro nginx:latest
fd966581baefcb23d7e03a2b97f91ea2b10421d2f47eed12a497fdc06eb19aa
root@myVM:~# docker container inspect nginxtest | grep "Mounts" -A
10
    "Mounts": [
      {
        "Type": "volume",
        "Name": "nginx-vol",
        "Source": "/var/lib/docker/volumes/nginx-vol/_data",
        "Destination": "/usr/share/nginx/html",
        "Driver": "local",
        "Mode": "ro",
        "RW": false,
        "Propagation": ""
      }
    ]
root@myVM:~# docker container exec nginxtest touch /usr/share/nginx/html/testfile
touch: cannot touch '/usr/share/nginx/html/testfile': Read-only file system
root@myVM:~# docker container exec nginxtest touch \
/usr/share/nginx/html/testfile
touch: cannot touch '/usr/share/nginx/html/testfile': Read-only file system
root@myVM:~# docker container exec nginxtest touch \ /usr/share/nginx/html/testfile
touch: cannot touch ' /usr/share/nginx/html/testfile': No such file or directory
```

```
root@myVM: ~
root@myVM:~# docker container stop nginxtest
nginxtest
root@myVM:~# docker container rm nginxtest
nginxtest
root@myVM:~# docker volume rm nginx-vol
nginx-vol
root@myVM:~# docker container rm `docker container ls -a -q` -f
"docker container rm" requires at least 1 argument.
See 'docker container rm --help'.

Usage: docker container rm [OPTIONS] CONTAINER [CONTAINER...]

Remove one or more containers
root@myVM:~# docker image rm `docker image ls -q` -f
Untagged: nginx:latest
Untagged: nginx@sha256:98f8ec75657d21b924fe4f69b6b9bfff2f6550ea48838af479d8894a852000e40
Deleted: sha256:900dca2a61f5799aabe662339a940cf444dfd39777648ca6a953f82b685997ed
Deleted: sha256:50c0e25eb83913b501a8ea5445575936a6b228d8c98098e802235f0d80fab3d6
Deleted: sha256:7e38d53ae3e73beedea84c21c8c0b5d08815296c825da3ec1c33bbd97f7aa349
Deleted: sha256:70ac6af7ddb2b2f6a0141751efbcb194e044c7adc386fd03cae6f03dc30d22e2
Deleted: sha256:6d3481c4d68045ed132f620a6e0b058d62f570ebf6b63ab57b54dcb94c960dac
Deleted: sha256:a290c3a72a0fd2ebbe9a6d930a66e52ae5cbb2622a4af034bf8356d53689a2c8
Deleted: sha256:a690310e45ce7d870bcf3283c9845c5cfc55e04b2a32d7035cee6b96bacec87
Deleted: sha256:9853575bc4f955c5892dd64187538a6cd02dba6968eba9201854876a7a257034
root@myVM:~# docker volume prune -f
Deleted Volumes:
27694a21cdaaa032e3ac49a77248e6d14b419b1cc60b4d80fdea3b41d3052b9f

Total reclaimed space: 0B
root@myVM:~#
```