

# CONTAINER ORCHESTRATION INFRASTRUCTURE

## AUTOMATION LAB

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BATCH- 05

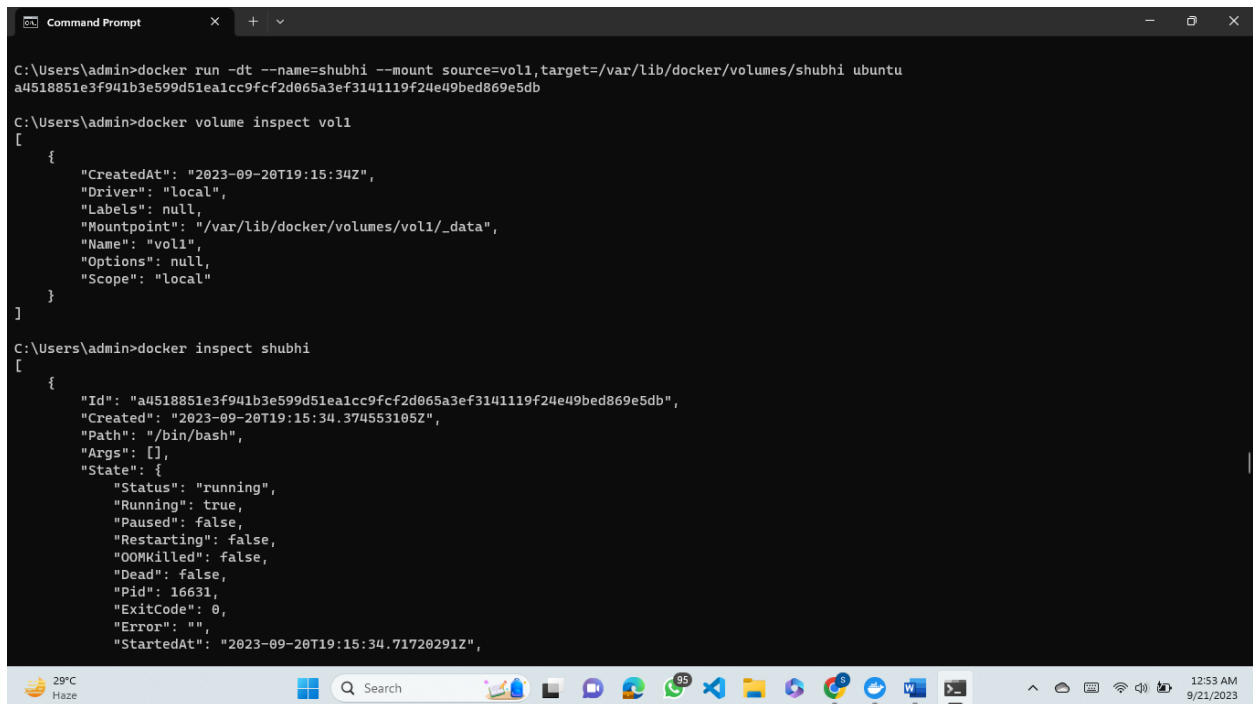
SAP ID- 500094571

### Docker Volumes

- **Run a container with docker volumes. Inspect whether the volume is attached or not with the container. Create a file inside the volume.**

**Remove the volume**

### Using --mount flag



```
Command Prompt
C:\Users\admin>docker run -dt --name=shubhi --mount source=vol1,target=/var/lib/docker/volumes/shubhi ubuntu
a4518851e3f941b3e599d51ea1cc9fcf2d065a3ef3141119f24e49bed869e5db

C:\Users\admin>docker volume inspect vol1
[
  {
    "CreatedAt": "2023-09-20T19:15:34Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/vol1/_data",
    "Name": "vol1",
    "Options": null,
    "Scope": "local"
  }
]

C:\Users\admin>docker inspect shubhi
[
  {
    "Id": "a4518851e3f941b3e599d51ea1cc9fcf2d065a3ef3141119f24e49bed869e5db",
    "Created": "2023-09-20T19:15:34.374553105Z",
    "Path": "/bin/bash",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 16631,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2023-09-20T19:15:34.71720291Z",
```

```
C:\Users\admin>docker exec -it shubhi bash
root@a4518851e3f9:/# cat > /var/lib/docker/volumes/shubhi/myfile.txt
Hello World!root@a4518851e3f9:/# exit
exit

C:\Users\admin>docker cp shubhi:/var/lib/docker/volumes/shubhi/myfile.txt myfile.txt
Successfully copied 2.05kB to C:\Users\admin\myfile.txt

C:\Users\admin>type myfile.txt
Hello World!
C:\Users\admin>docker stop shubhi
shubhi

C:\Users\admin>docker rm shubhi
shubhi

C:\Users\admin>docker volume rm vol1
vol1

C:\Users\admin>
```

## Using -v flag

```
Microsoft Windows [Version 10.0.22621.2283]
(c) Microsoft Corporation. All rights reserved.

C:\Users\admin>docker run -d --name=shubhi -v myvol:/var/lib/docker/volumes/newshubhi nginx:latest
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
a803e7c4b030: Pull complete
8b625c47d697: Pull complete
4d3239651a63: Pull complete
0f816efa513d: Pull complete
01d159b8db2f: Pull complete
5fb9a81470f3: Pull complete
9b1e1e7164db: Pull complete
Digest: sha256:daf2404ac5e6759c5671b81579b598900b39260bdd6cdb5890f6f1386b193175
Status: Downloaded newer image for nginx:latest
99c8d0c88b89053f07c8cccb14397dd09e4dbce9a84ecd4c46f3ed277a45f0f0

C:\Users\admin>docker inspect shubhi
[
  {
    "Id": "99c8d0c88b89053f07c8cccb14397dd09e4dbce9a84ecd4c46f3ed277a45f0f0",
    "Created": "2023-09-20T19:26:38.231311498Z",
    "Path": "/docker-entrypoint.sh",
    "Args": [
      "nginx",
      "-g",
      "daemon off;"
    ],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
```

```
Command Prompt
"IPPrefixLen": 16,
"IPv6Gateway": "",
"GlobalIPv6Address": "",
"GlobalIPv6PrefixLen": 0,
"MacAddress": "02:42:ac:11:00:02",
"DriverOpts": null
}
}
]

C:\Users\admin>docker exec -it shubhi bash
root@99c8d0c88b89:/# cat /var/lib/docker/volumes/newshubhi/filenew.txt
Hello Shubhi!root@99c8d0c88b89:/# exit
exit

C:\Users\admin>docker cp shubhi:/var/lib/docker/volumes/newshubhi/filenew.txt filenew.txt
Successfully copied 2.05kB to C:\Users\admin\filenew.txt

C:\Users\admin>type filenew.txt
Hello Shubhi!
```

```
C:\Users\admin>docker stop shubhi
shubhi

C:\Users\admin>docker rm shubhi
shubhi

C:\Users\admin>docker volume rm myvol
myvol

C:\Users\admin>
```

We can also verify the existence of created volumes in the "volumes" section of Docker Desktop.

