



**APPLICATION CONTAINERIZATION AND ORCHESTRATION
LAB**

STUDENT

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SUBMITTED TO

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Step 1: Create a Docker Volume

Run the following command to create a Docker volume named "my_volume":

```
Sachins-Air:~ sachinagarwal$ docker volume create v1
v1
```

Step 2: Launch Containers with the Volume

```
Sachins-Air:~ sachinagarwal$ docker run -it --name container1 -v v1:/app/data nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2023/10/07 08:41:00 [notice] 1#1: using the "epoll" event method
2023/10/07 08:41:00 [notice] 1#1: nginx/1.25.2
2023/10/07 08:41:00 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2023/10/07 08:41:00 [notice] 1#1: OS: Linux 5.15.49-linuxkit-pr
2023/10/07 08:41:00 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2023/10/07 08:41:00 [notice] 1#1: start worker processes
2023/10/07 08:41:00 [notice] 1#1: start worker process 28
2023/10/07 08:41:00 [notice] 1#1: start worker process 29
2023/10/07 08:41:00 [notice] 1#1: start worker process 30
2023/10/07 08:41:00 [notice] 1#1: start worker process 31
2023/10/07 08:41:06 [notice] 1#1: signal 28 (SIGWINCH) received

2023/10/07 10:31:26 [notice] 1#1: worker process 30 exited with code 0
2023/10/07 10:31:26 [notice] 1#1: worker process 28 exited with code 0
2023/10/07 10:31:26 [notice] 1#1: exit
```

Enter the container to observe the volume and create a file inside it:

```
Sachins-Air:~ sachinagarwal$ docker exec -it container2 bash
root@0fd729fb1783:/# ls /app/data
file_in_volume.txt
root@0fd729fb1783:/# exit
exit
```

Step 3: Cleanup

Stop and remove the containers:

```
Sachins-Air:~ sachinagarwal$ docker stop container2 container1
container2
container1
```

```
Sachins-Air:~ sachinagarwal$ docker rm container2 container1
container2
container1
```

Remove the volume:

```
Sachins-Air:~ sachinaggarwal$ docker volume rm vol1  
vol1
```