

Docker Volumes

IN720 Virtualisation

Introduction

In this lab we are going to play around with Docker volumes to see how we can create and seed volumes with data that we can then share across other containers.

1 Build a data container

Build a new container from a Dockerfile that with the following:

1. Create a directory, `/data` inside your container.
2. In `/data`, create files named `foo`, `bar`, and `baz`.
3. Make `/data` a volume.

Build your image and launch a container called `vol_lab_1` from it.

2 Find your volume on the host system

In another ssh session, inspect your new container to find its volumes with the command

```
sudo docker inspect -f {{.Volumes}} vol_lab_1
```

Once you find the directory on the host that stores your volume, modify one of the files inside it. Attach a terminal to `vol_lab_1` and see if the changes on the host system are visible inside the container.

3 Using the volume in another container

Shut down `vol_lab_1`. Start a new container with the command

```
sudo docker run -it -volumes-from vol_lab_1 ubuntu /bin/bash
```

When your new container starts, inspect the `/data` volume inside it. Make some changes inside the volume and then shut down this container. Then, check the volume directory on the host system and see if your changes are visible there.