04. Folder Structure

It's good practice to give all containers the same access to the same root directory or share. This is why all containers in the compose file have the bind volume mount `/data:/data`. It makes everything easier, plus passing in two volumes such as the commonly suggested `/tv`, `/movies`, and `/downloads` makes them look like two different file systems, even if they are a single file system outside the container. See my current setup below.

```
data
├── books
├── downloads
│   ├── qbittorrent
│   │   ├── completed
│   │   ├── incomplete
│   │   └── torrents
│   └── nzbget
│       ├── completed
│       ├── intermediate
│       ├── nzb
│       ├── queue
│       └── tmp
├── movies
├── music
├── shows
└── youtube
```

1. Now, to implement this we will move into our NFS share inside our VM and create the above folder structure with the command

```
mkdir -p downloads/qbittorrent/{completed,incomplete,torrents} && mkdir -p
downloads/nzbget/{completed,intermediate,nzb,queue,tmp}
```

2. Perfect! You can check with "ls" if the folder structure was actually created correctly.

3. Now, to get the permissions right we need to move back into **TrueNas** to have the ownership of the folders recursively owned by user 1000 and group 1000.

4. Go to TrueNas -> Datasets -> DATASET_NAME -> Click on Permissions

5. In here make sure that the 6 top blocks are all set and that you check the boxes

- ☑ Apply User
- ☑ Apply Group
- ☑ Apply permissions recursively.

6. Then accept the Warning and save the permission. Sweet! now you are ready to start setting up the docker compose file and can be sure that all the containers have the proper permissions to all the folders.

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