Mounting a Network Folder with NFS in Ubuntu

A note about container technology is that at least with LXC or LXD, containers are not allowed to mount network folders. Instead, you need to mount via the host and expose the folder to the container.

NFS Server Configuration

Separate article will be written on setting up.

This is the key article to understand how to do it. It's not user based but ip range based on the Synology system,

https://www.synology.com/en-us/knowledgebase/DSM/tutorial/File_Sharing/How_to_access_files_on_Synology_NAS_within_the_local_network_NFS

NFS Client

Install nfs client software,

```
sudo apt-get install nfs-common
```

After ensuring IP was setup properly it was just a matter of creating your mount path. This is a one time activity,

```
cd ~
mkdir -p mnt/guest.public
# forget if I also need to make the subdirectory
sudo mount -t nfs 192.168.0.5:/volume1/guest.public ./mnt/guest.public/
```

Connect your mount,

```
cd ~
mkdir -p mnt/guest.public
# forget if I also need to make the subdirectory
sudo mount -t nfs 192.168.0.5:/volume1/guest.public ./mnt/guest.public/
# confirm by looking at your files...
```

Unmounting,

```
cd ~
umount ./mnt/guest.public/
```

Setup Automatic Mounting on Startup

Make the directories for fstab,

```
sudo su - serveradmin
mkdir -p mnt/guest.public
exit
cd /home/serveradmin
sudo mv ./mnt/ /opt/
```

...

```
sudo cp /etc/fstab /ect/fstab.v0.0
```

Add the following to the bottom of the file,

```
# Mount NFS drive
192.168.0.5:/volume1/guest.public /opt/mnt/guest.public/ nfs4
```

Reboot the machine...

Troubleshooting

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References

Benchmark on best Mounting Protocol for Ubuntu

Speed Comparison - https://ferhatakgun.com/network-share-performance-differences-between-nfs-smb/