

NFS Setup

Everything was done while watching the recording provided in Moodle.

First, I opened a new instance in pouta:

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor	Key Pair
<input type="checkbox"/>	benny-nfs	Ubuntu-22.04	192.168.1.29	standard.tiny	benny-server-FOR-NFS

After this I made the ssh key's for connecting to the nfs.

Pinging the nfs was a success.

```
benny@benny-server: ~  
benny@benny-server:~$ ping nfs-server  
PING nfs-server (192.168.1.29) 56(84) bytes of data.  
64 bytes from nfs-server (192.168.1.29): icmp_seq=1 ttl=64 time=1.01 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=2 ttl=64 time=0.596 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=3 ttl=64 time=0.464 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=4 ttl=64 time=0.496 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=5 ttl=64 time=0.541 ms  
^C  
--- nfs-server ping statistics ---  
5 packets transmitted, 5 received, 0% packet loss, time 4061ms  
rtt min/avg/max/mdev = 0.464/0.620/1.007/0.198 ms  
benny@benny-server:~$
```

Mounting the directory to the client (benny-server) was problematic, because I didn't have the default security group in the benny-server so I wasn't able to mount the directory. But after adding the default security group, I was able to move on with the task:

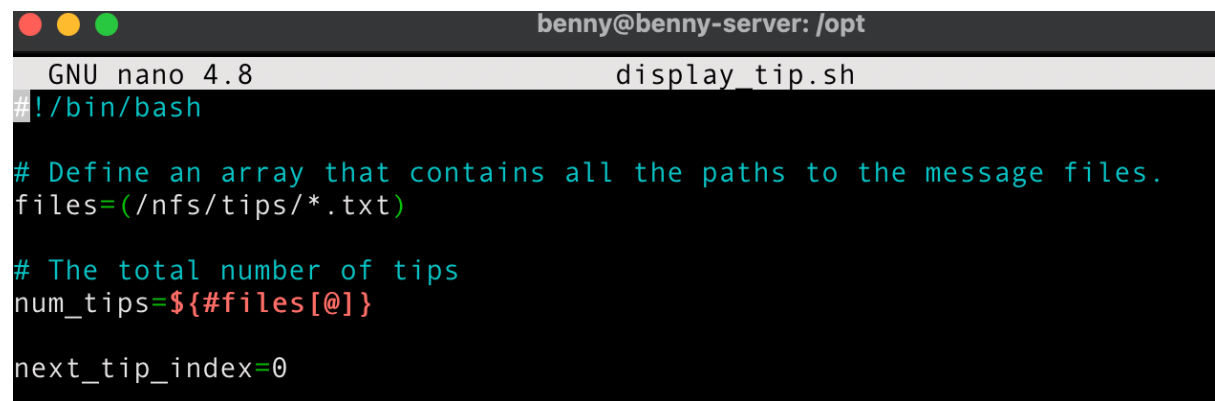
```
benny@benny-server: ~  
benny@benny-server:~$ ping nfs-server  
PING nfs-server (192.168.1.29) 56(84) bytes of data.  
64 bytes from nfs-server (192.168.1.29): icmp_seq=1 ttl=64 time=1.01 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=2 ttl=64 time=0.596 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=3 ttl=64 time=0.464 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=4 ttl=64 time=0.496 ms  
64 bytes from nfs-server (192.168.1.29): icmp_seq=5 ttl=64 time=0.541 ms  
^C  
--- nfs-server ping statistics ---  
5 packets transmitted, 5 received, 0% packet loss, time 4061ms  
rtt min/avg/max/mdev = 0.464/0.620/1.007/0.198 ms  
benny@benny-server:~$ hostname > /nfs/tips/test-benny.txt  
benny@benny-server:~$ cat /nfs/tips/test-benny.txt  
benny-server  
benny@benny-server:~$ ls -la /nfs/tips  
total 12  
drwxrwxrwt 2 nobody nogroup 4096 May 11 15:04  
drwxr-xr-x 3 root root 4096 May 9 12:06 ..  
-rw-rw-r-- 1 benny benny 13 May 11 15:04 test-benny.txt  
benny@benny-server:~$  
benny@benny-nfs: ~  
benny@benny-nfs:~$ cat /var/nfs/tips/test-benny.txt  
benny-server  
benny@benny-nfs:~$
```

After this I made the server remember the mount by adding this line to `/etc/fstab`
`nfs-server:/var/nfs/tips /nfs/tips nfs auto,nofail,noatime,nolock,intr,tcp,actimeo=1800 0 0`

Rebooting the system was a success.

For making the tips of the day files come from the nfs. I moved all the text files into `/nfs/tips` directory from `/opt/tips` using command: `sudo mv /opt/tips/*.txt /nfs/`

After copying the tips from the local storage, I changed the script to search for the `.txt` files from the nfs:

A screenshot of a terminal window with a dark background. The title bar at the top shows three colored window control buttons (red, yellow, green) on the left and the text 'benny@benny-server: /opt' on the right. Below the title bar, the terminal shows the GNU nano 4.8 editor interface. The first line of the editor shows 'display_tip.sh' in the top right corner. The second line shows the shebang '#!/bin/bash'. The third line is a comment '# Define an array that contains all the paths to the message files.' followed by the code 'files=(/nfs/tips/*.txt)'. The fourth line is a comment '# The total number of tips' followed by the code 'num_tips=\${#files[@]}'. The fifth line shows the code 'next_tip_index=0'.

```
benny@benny-server: /opt
GNU nano 4.8 display_tip.sh
#!/bin/bash

# Define an array that contains all the paths to the message files.
files=(/nfs/tips/*.txt)

# The total number of tips
num_tips=${#files[@]}

next_tip_index=0
```

How all works as expected.