

Problem with raspberry pi (debian) and nfs-kernel-server.

Systemd apparently starts the nfs-kernel-server before rpcbind has completed starting.

Solution that works for me:

The relevant nfs services are enable and started.

1. Make sure that nfs-kernel-server gets started at boottime.

```
# systemctl enable nfs-kernel-server.service
```

After a reboot, nfs is not registered.

```
# rpcinfo -p
program vers proto  port  service
 100000    4   tcp    111  portmapper
 100000    3   tcp    111  portmapper
 100000    2   tcp    111  portmapper
 100000    4   udp    111  portmapper
 100000    3   udp    111  portmapper
 100000    2   udp    111  portmapper
```

2. Create a service that is called after the portmapper is started.

- 2a. Create a script that runs the start a couple of times.

```
cd /usr/local/bin/
# echo #!/bin/bash > nfs_kernel_start.sh
# echo service nfs-kernel-server restart >> nfs_kernel_start.sh
# chmod +x /usr/local/bin/nfs_kernel_start.sh
```

2b. Create the service

Create the following file and content:

```
/etc/systemd/system/nfs_kernel_start.service
```

```
[Unit]  
After=nfs_kernel_start.service  
  
[Service]  
ExecStart=/usr/local/bin/nfs_kernel_start.sh  
  
[Install]  
WantedBy=multi-user.target
```

Set the correct permissions.

```
chmod 644 /etc/systemd/system/nfs_kernel_start.service
```

3. Enable the service and start it.

```
# systemctl enable nfs_kernel_start.service  
# systemctl start nfs_kernel_start.service  
  
# rpcinfo -p  
100000 4 tcp 111 portmapper  
100000 3 tcp 111 portmapper  
100000 2 tcp 111 portmapper  
100000 4 udp 111 portmapper  
100000 3 udp 111 portmapper  
100000 2 udp 111 portmapper  
100003 2 tcp 2049 nfs  
100003 3 tcp 2049 nfs  
100003 4 tcp 2049 nfs  
100227 2 tcp 2049  
100227 3 tcp 2049  
100003 2 udp 2049 nfs  
100003 3 udp 2049 nfs  
100003 4 udp 2049 nfs  
(snipped)
```