

Manage Network Storage

Samba

Tips 1:

Samba is a file transfer system from one system to another system.

For example, on Linux you can make use of a SAMBA server.

Advantage of samba server:

the protocol used to perform the transfer is not just a “Linux thing.” This makes it easier to transfer files between different operating systems, such as between Linux and Microsoft Windows.

Able to learn:

Create and access Samba shares.

Create and access NFS shares.

Share storage locations via iSCSI.

Use an iSCSI resource on a client system.

Samba package:

- SAMBA: This package contains the SAMBA server software.
- SAMBA-client: This package contains the SAMBA client programs, which allow you to connect to SAMBA servers or Microsoft Windows DFS.
- SAMBA-common: This package contains software used by both the SAMBA server and client utilities.

Samba configuration:

File: /etc/SAMBA/smb.conf

Tips 2:

Understanding portmap Think of the portmap utility as one of those old-fashioned telephone operators. You may have seen these in older movies, where someone picks up the phone and says, "Operator, connect me to Boston 4567." The operator knows which connection to make to connect the parties. If you cannot envision that example, consider that portmap provides a map of the ports in use by the various services and programs on the computer, much like a legend on a map identifies each element.

That is portmap's primary job. When an RPC-based service starts, it tells portmap how it can be reached by providing portmap with a network port number. When a client system tries to connect to a server, it asks the portmap utility which port the service is using.

Tips 3:

NFS Server command:

From root:

```
#exportfs
```

```
# exportfs -o ro 192.168.1.100:/usr/share/doc
```

The nfsstat command can display useful NFS information. For example, the following command displays what is currently mounted by NFS clients:

```
# nfsstat -m
```

The showmount command displays similar information:

```
# showmount -a
```

Tips 4:

Configuring an NFS Client:

First create regular directory:

```
# mkdir /access
```

Next, use the mount command to mount the NFS share:

```
# mount 192.168.1.22:/share /access
```

You can verify the mount was successful either by executing the mount command or by viewing the `/proc/mounts` file. The advantage of viewing the `/proc/mounts` file is that it provides more detail:

```
# mount | tail -1
```

If the NFS client was rebooted, this mount would not be reestablished after the system boots. To make this a persistent mount across reboots, add an entry like the following in the `/etc/fstab` file:

```
# tail -1 /etc/fstab
```

After adding this entry to the `/etc/fstab` file, unmount the NFS share (if necessary) and test the new entry by only providing the mount point when executing the mount command:

```
# umount /access
```

```
# mount /access
```

```
mount | tail -1
```