Tiandy Technologies Co., Ltd.

No.8 Haitai Huake Rd2(Huayuan), Binhai Hi-Tech Zone, Tianjin 300384, China Tel: +86-22-58596037 Fax: +86-22-58596177   en.tiandy.com

How to Use and Setup NFS Server

Description: this document will show you how to use NFS at NVR and how to setup NFS server

Note: NVR just supports backup record to NFS server

Prerequisites: you need to prepare a NFS server

Section 1: How to use NFS in NVR

1. **NFS setting**

    1.1 Click following step : Configuration ＞Storage＞NFS

    1.2 Enter your NFS server IP address and Mapping Path

    1.3 Save and query again, wait for connection.

Note: Please do not set a password on the NFS server, otherwise the device cannot successfully connect to the NFS server.

Section 2: How to Setup NFS Server ——Client in Centos 7

1. **Setup NFS-server**

    In following content,we are doing it in Centos, which uses yum as the package manager.

    1.1 Installing nfs-utils

```
sudo su -
yum install nfs-utils
```

Tiandy

Tiandy Technologies Co., Ltd.

No.8 Haitai Huake Rd2(Huayuan), Binhai Hi-Tech Zone, Tianjin 300384, China Tel: +86-22-58596037 Fax: +86-22-58596177 en.tiandy.com

1.2 Choose the directory to share. If not present create one.

```
mkdir /var/nfs_share_dir
```

1.3 Add permissions and ownwership privilages to the shared directory.

```
chmod -R 755 /var/nfs_share_dir
chown nfsnobody:nfsnobody /var/nfs_share_dir
```

1.4 Start the nfs services.

```
systemctl enable rpcbind
systemctl enable nfs-server
systemctl enable nfs-lock
systemctl enable nfs-idmap
systemctl start rpcbind
systemctl start nfs-server
systemctl start nfs-lock
systemctl start nfs-idmap
```

1.5 Configuring the exports file for sharing.

Open the exports file and add these lines.

```
vi /etc/exports
```

Fill in the the file-shared path and clients details in /etc/exports.

192.168.48.101- Client's IP

```
/var/nfs_share_dir     192.168.48.101(rw,sync,no_root_squash)
```

1.6 Restart the service

```
systemctl restart nfs-server
```

1.7 Only for Centos 7,NFS service override

Tiandy Technologies Co., Ltd.

No.8 Haitai Huake Rd2(Huayuan), Binhai Hi-Tech Zone, Tianjin 300384, China Tel: +86-22-58596037 Fax: +86-22-58596177 en.tiandy.com

```
firewall-cmd --permanent --zone=public --add-service=nfs
firewall-cmd --permanent --zone=public --add-service=mountd
firewall-cmd --permanent --zone=public --add-service=rpc-bind
firewall-cmd --reload
```

2. Setup NFS-Client (s)

2.1 Installing nfs-utils

```
sudo su -
yum install nfs-utils
```

2.2 Create a mount point

```
mkdir -p /mnt/nfs/var/nfs_share_dir
```

2.3 Mounting the file system

```
mount -t nfs 192.168.48.100:/var/nfs_share_dir /mnt/nfs/var/nfs

-t   type of filesystem
192.168.48.100 server's IP
```

2.4 Verify if mounted

```
$ df -kh

Filesystem                       Size  Used Avail Use% Mounted on
/dev/mapper/centos-root           39G  1.1G   38G   3% /
devtmpfs                         488M     0  488M   0% /dev
tmpfs                            494M     0  494M   0% /dev/shm
tmpfs                            494M  6.7M  487M   2% /run
tmpfs                            494M     0  494M   0% /sys/fs/
/dev/mapper/centos-home           19G   33M   19G   1% /home
/dev/sda1                        497M  126M  372M  26% /boot
192.168.48.100:/var/nfs_share_dir 39G  980M   38G   3% /mnt/r
```

2.5 Mounting permanently.

Now if the client is rebooted, we need to remount again. So, to mount

permanently, we need to configure /etc/fstab file.

Append this to /etc/fstab

```
192.168.48.100:/var/nfs_share_dir /mnt/nfs/var/nfs_share_dir nf
```

To verify, create a file in the Client-side, and open in server-side.

Client-side(192.168.48.101)

```
echo "Client Hello" >> /mnt/nfs/var/nfs_share_dir/testing.txt
```

Server-side(192.168.48.100)

```
$ cat /var/nfs_share_dir/testing.txt

Client Hello
```

Now client is able to access the files of server.