

# D. B. J. COLLEGE, CHIPLUN Page No.: 25

### DEPARTMENT OF COMPUTER SCIENCE

Expt. No.	Name: Piyush Pandurang Burate Class: TYCS Roll No.: 523
5	Title of Experiment: Network File System (NFS)
Date	Sub titles: Assignment/ Problem Solution, Flow chart/Algorithm, Problem Listing,
[6-8-2023	Input Screen, Output Screen, Comments (If any)
	Aim: Configure NFS server to share your
	directories on your NFS
	Theamy
	Theory:
	• NFS
	- NFS allows a system to share directories
	and Files with other over a network.
	By using NFS, users and programs can
	acress & Files on remote systems almost
	as if they mere local files.
	- Some of the files most notable benefits
	that NFS can provide are
	i) Local workstations use less disk space
	because commonly used data can be stored
***************************************	on a single machine and still remain
	acresible to others over the network.
	2) There or is no need for users to have
	separate home directories on every
<del></del>	network machine.
Remark	3) Home directories could be setup on the
- V	NFS server and made available throughout
Signature	the network.

	4) Storage devices such as tloppy aisks,
	C.DROM drives and USB thumb drives
	can be used by other machine on the
	network.
	5) This may reduce the number of
	removable drives throughout the
	network.
	/
<del>- ,</del>	

## **NFS**

#### Server:

root@ammar-VirtualBox:~# nano /etc/exports
root@ammar-VirtualBox:~# hostname
ammar-VirtualBox
root@ammar-VirtualBox:~# nano /etc/exports
root@ammar-VirtualBox:~# systemctl restart nfs-server
root@ammar-VirtualBox:~# mehraj-VirtualBox
mehraj-VirtualBox: command not found
root@ammar-VirtualBox:~# ping mehraj-VirtualBox
ping: unknown host mehraj-VirtualBox
root@ammar-VirtualBox:~# mount -t nfs mehraj-VirtualBox:/home /home

root@ammar-VirtualBox:~# mount -t nfs mehraj-VirtualBox:/home /home mount.nfs: Failed to resolve server mehraj-VirtualBox: Name or service not known root@ammar-VirtualBox:~# systemctl restart nfs-server root@ammar-VirtualBox:~# mount -t nfs mehraj-VirtualBox:/home /home mount.nfs: Failed to resolve server mehraj-VirtualBox: Name or service not known root@ammar-VirtualBox:~# apt-get -y install nfs-kernel-server Reading package lists... Done

snapd-login-servicepp
Use 'apt autoremove' to remove it.

O upgraded, O newly installed, O to remove and 147 not upgraded.
root@ammar-VirtualBox:~# systemctl restart nfs-server
root@ammar-VirtualBox:~# nano /etc/exports
root@ammar-VirtualBox:~# systemctl restart nfs-server
root@ammar-VirtualBox:~# nano /etc/exports
root@ammar-VirtualBox:~# pwd
/root
root@ammar-VirtualBox:~# ls
Desktop Documents Downloads Music Pictures Public Templates Videos

CLIENT:-

root@mehraj-VirtualBox:/# apt-get -y install nfs-common

root@ammar-VirtualBox:~# cd home

Creating config file /etc/idmapd.conf with new version Creating config file /etc/default/nfs-common with new version Adding system\_user `statd' (UID 121) ...

root@mehraj-VirtualBox:/# systemctl retart nfs
Unknown operation retart.
root@mehraj-VirtualBox:/# systemctl retart nfs-common
Unknown operation retart.
root@mehraj-VirtualBox:/# systemctl retart nfs-server
Unknown operation retart.
root@mehraj-VirtualBox:/# nano /etc/idmapd.conf
root@mehraj-VirtualBox:/# apt-get -y install nfs-common
Reading package lists... Done

root@mehraj-VirtualBox:/# mount -t nfs mehraj-VirtualBox:/home /home root@mehraj-VirtualBox:/# sudo apt-get -y install nfs-common

#### Reading package lists... Done

root@mehrai\_VirtualBov:/# nano

root@mehraj-VirtualBox:/# nano /etc/idmapd.conf root@mehraj-VirtualBox:/# mount -t nfs 192.168.56.101:/home /home root@mehraj-VirtualBox:/# df -hT

Filesystem Type Size Used Avail Use% Mounted on

 udev
 devtmpfs
 476M
 0 476M
 0% /dev

 tmpfs
 tmpfs
 100M
 4.9M
 95M
 5% /run

 /dev/sda1
 ext4
 8.8G
 4.3G
 4.1G
 52% /

 tmpfs
 tmpfs
 500M 212K 499M 1% /dev/shm

 tmpfs
 tmpfs
 5.0M 4.0K 5.0M 1% /run/lock

 tmpfs
 500M 0 500M 0% /sys/fs/cgroup

tmpfs tmpfs 100M 68K 100M 1%/run/user/1000

/dev/sr0 iso9660 52M 52M 0 100% /media/mehraj/VBox\_GAs\_7.0.10

192.168.56.101:/home nfs4 9.3G 56M 8.8G 1%/home

root@mehraj-VirtualBox:/# Is

bin dev initrd.img media proc sbin sys var boot etc lib mnt root snap tmp vmlinuz cdrom home lost+found opt run srv usr root@mehraj-VirtualBox:/# nano /etc/fstab root@mehraj-VirtualBox:/# apt-get -y install autofs Reading package lists... Done

••••••

Processing triggers for systemd (229-4ubuntu21.1) ...

Processing triggers for ureadahead (0.100.0-19) ...

root@mehraj-VirtualBox:/# nano /etc/auto.master

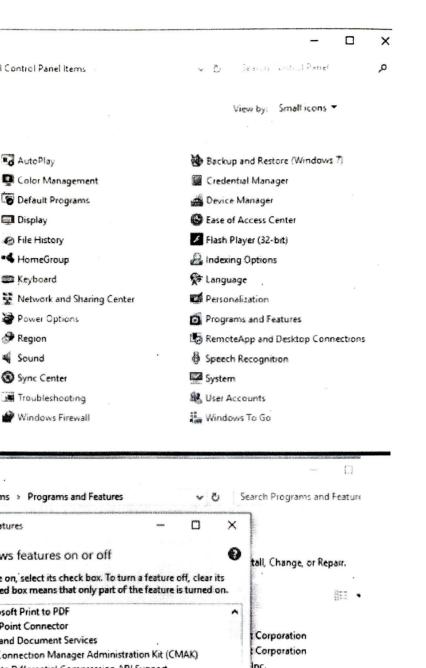
root@mehraj-VirtualBox:/# mkdir /mntdir

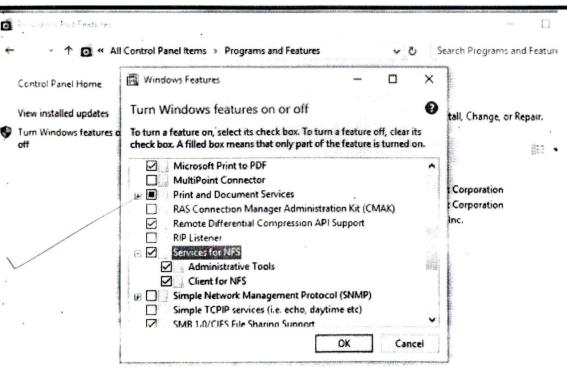
root@mehraj-VirtualBox:/# systemctl restart autofs

root@mehraj-VirtualBox:/# cd /mntdir

root@mehraj-VirtualBox:/mntdir# ll

root@mehraj-VirtualBox:/mntdir# cat /proc/mounts | grep mntdir





Currently installed programs Total size: 108 MB

'3 programs installed

图图 All Control Panel Items

Administrative Tools

Devices and Printers

File Explorer Options

Date and Time

Internet Options

Phone and Modem

Storage Spaces

Windows Defender

Work Folders

Security and Maintenance

Tackbar and Navigation

A Fonts

₱ Mouse

Recovery

BitLocker Drive Encryption

Adjust your computer's settings

Control Panel

All Control Panel Items

AutoPlay

Display

File History

· HomeGroup

Power Options

Keyboard

Region

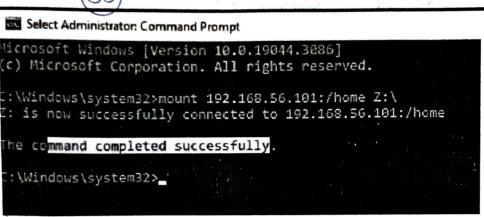
Sound

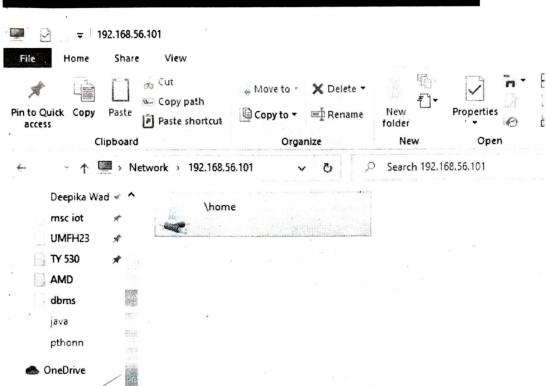
Sync Center

Troubleshooting

Windows Firewall

Default Programs





THIS PC