||Code NFS Linux Server

Steps I've taken setting up the file server NFS in linux environments
└─$ sudo apt install nfs-kernel-server
└─$ sudo mkdir /mnt/myshareddir
created directory where my the NFS shares will be, the export folder for my file server
└─$ sudo chown nobody:nogroup /mnt/myshareddir
removing onwnership of the File server
└─$ sudo chmod 777 /mnt/myshareddir
giving everyone on all groups all connected access to modify files(Reda, Write, Execute)

┌──(kali㉿kali)-[/etc]
└─$ sudo vim /etc/exports

enable access to a single client	/mnt/myshareddir {clientIP} (rw,sync,no_subtree_check)

From the configuration file of the File Server

The remaining configurations are for the clients-side

||PART i

Fpt Server
sudo apt install vsftpd
sudo mv /etc/vsftpd.conf /etc/vsftpd.conf_orig #backup of configuration file, reucing single point of failure

──(kali㉿kali)-[~]
└─$ sudo systemctl restart vsftpd

┌──(kali㉿kali)-[~]
└─$ sudo useradd -m ftpuser
sudo passwd

┌──(kali㉿kali)-[~]
└─$ sudo passwd ftpuser
New password:
Retype new password:
passwd: password updated successfully
FileTp

placing a directory at home of client directory to ensure its working when tested
─(kali㉿kali)-[~]
└─$ sudo bash -c "echo FTP TESTING> /home/ftpuser/FTP-TEST"

login attempt

```
┌──(kali㉿kali)-[~]
└─$ ftp 127.0.0.1
Connected to 127.0.0.1.
220 (vsFTPd 3.0.3)
Name (127.0.0.1:kali): ftpuser
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||10043|)
150 Here comes the directory listing.
-rw-r--r--    1 0        0              12 Apr 08 09:42 FTP-TEST
226 Directory send OK.
ftp>
```

successful Shell

modifying server to allow anonymous login

```
─(kali㉿kali)-[~]
└─$ sudo nano /etc/vsftpd.conf
anonymous_enable=YES
```

sudo systemctl restart vsftpd

```
─(kali㉿kali)-[~]
└─$ ftp 127.0.0.1
Connected to 127.0.0.1.
220 (vsFTPd 3.0.3)
Name (127.0.0.1:kali): ftpuser
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> quit
221 Goodbye.
```

Successful login

||PART2

Samba Services

sudo systemctl status smb

```
○ smbd.service - Samba SMB Daemon
     Loaded: loaded (/lib/systemd/system/smbd.service; disabled; preset: disabl>
     Active: inactive (dead)
       Docs: man:smbd(8)
```

man:samba(7)
man:smb.conf(5)

(kali㉿kali)-[~]
└─$ sudo systemctl start smb
──(kali㉿kali)-[~]
└─$ sudo systemctl enable smbd
its working and enabled

Now its configuration time

creating backup; ──(kali㉿kali)-[~]
└─$ sudo cp -pf /etc/samba/smb.conf /etc/smb.conf.bak

─(kali㉿kali)-[~]
└─$ id
Helps show individual and group ids of the system
──(kali㉿kali)-[~]
└─$ id toang
uid=1002(toang) gid=1002(toang) groups=1002(toang),100(users)

┌──(kali㉿kali)-[~]
└─$ id kali
uid=1000(kali) gid=1000(kali)
groups=1000(kali),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(
plugdev),100(users),104(kvm),106(netdev),116(wireshark),118(bluetooth),120(lpadmin),126(scanner),
139(kaboxer),151(libvirt)

displays user ID primary groups and secondary groups associated with the user eg kali/toang
─(kali㉿kali)-[~]
└─$ id -nG
kali adm dialout cdrom floppy sudo audio dip video plugdev users kvm netdev wireshark bluetooth
lpadmin scanner kaboxer libvirt

this ommits the numbers giving us names of user and groups
-G all groups -n Names
changed group name in Samba config file to my current working group

──(kali㉿kali)-[~] creating the directory we share on our samba server
└─$ sudo mkdir /srv/samba
[sudo] password for kali:

┌──(kali㉿kali)-[~] making it writeable and browseable
└─$ sudo chmod a+rwx /srv/samba

we should add that to the config file
┌──(kali㉿kali)-[~]

└─$ sudo vim /etc/samba/smb.conf

[anonyous]
path= /srv/samba
browseable =yes
writeable =yes
read only=no
guest =ok

┌──(kali㉿kali)-[~]
└─$ sudo systemctl restart smb

Adding Secured Shares
──(kali㉿kali)-[~]
└─$ sudo addgroup smbgrp
info: Selecting GID from range 1000 to 59999 ...
info: Adding group `smbgrp' (GID 1004) ...

creating samba group

creating user
┌──(kali㉿kali)-[~]
└─$ sudo adduser shares
info: Adding user `shares' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `shares' (1005) ...
info: Adding new user `shares' (1005) with group `shares (1005)' ...
info: Creating home directory `/home/shares' ...
info: Copying files from `/etc/skel' ...
New password:

usr:shares pass:Hello09!

┌──(kali㉿kali)-[~]
└─$ sudo adduser shares smbgrp
info: Adding user `shares' to group `smbgrp' ...

──(kali㉿kali)-[~]
└─$ sudo smbpasswd -a shares
New SMB password:
Retype new SMB password:
Added user shares.
groupPa44
groupPa44

creating secure folder for protected files
──(kali㉿kali)-[~]

└─$ sudo mkdir -p /srv/samba-secured

┌──(kali㉿kali)-[~]
└─$ sudo chmod -R 0770 /srv/samba-secured

┌──(kali㉿kali)-[~]
└─$ sudo chown root:smbgrp /srv/samba-secured

┌──(kali㉿kali)-[~]
└─$ sudo vim /etc/samba/smb.conf
changed permission and ownership
added this to config file
[SECURED]
path = /srv/samba-secured
valid users = @smbgrp
browseable =yes
writeable =yes
read only =no

└─$ sudo service smb restart
we then got samba to rewrite and configure our changes. Updating to a secured service with uer authentication