We are going to connect our ldap users home directory to an nfs share. We will begin on the nfs server.
joe@nfss:~$ sudo mkdir /user_homes
joe@nfss:~$
joe@nfss:~$ echo "make that dir available to nfs clients (ldap clients)"
make that dir available to nfs clients (ldap clients)
joe@nfss:~$ sudo vi /etc/exports
# /etc/exports: the access control list for filesystems which may be exported to NFS clients. See exports(5).

# Example for NFSv2 and NFSv3:
# /srv/homes    hostname1(rw,sync,no_subtree_check) hostname2(ro,sync,no_subtree_check)

# Example for NFSv4:
# /srv/nfs4     gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_check)
# /srv/nfs4/homes gss/krb5i(rw,sync,no_subtree_check)

#/data/images will be the directory that we want to share
#144.xx.yy.zz is the host that we allow to share it followed by various options
/data/images 144.38.220.211(rw,sync,no_subtree_check,no_root_squash)
/foo 144.38.220.211(rw,sync,no_subtree_check,no_root_squash) 144.38.220.212(rw,sync,no_subtree_check,no_root_squash)

#Here is the newly added line
/userhomes 144.38.220.192/27(rw,sync,no_subtree_check,no_root_squash)
joe@nfss:$ echo "Restart the export service"
Restart the export service
joe@nfss:$ sudo service nfs-kernel-server restart
  * Stopping NFS kernel daemon [ OK ]
  * Unexporting directories for NFS kernel daemon... [ OK ]
  * Exporting directories for NFS kernel daemon... [ OK ]
  * Starting NFS kernel daemon [ OK ]
joe@nfss:$
Now I am on a pre-configured ldap client. This client has not been configured with nfs. Go back and look at how to configure an ldap client.

```
$ id eskeleto
uid=11000(eskeleto) gid=11000(eskeleto) groups=11000(eskeleto)
```

```
$ echo "Verify"
Verify
```

$
install nfs client utils

sudo apt-get install nfs-common

Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  open-iscsi watchdog
The following NEW packages will be installed:
  nfs-common
0 upgraded, 1 newly installed, 0 to remove and 174 not upgraded.
Need to get 0 B/181 kB of archives.
After this operation, 746 kB of additional disk space will be used.
Selecting previously unselected package nfs-common.
(Reading database ... 55281 files and directories currently installed.)
Preparing to unpack .../nfs-common_1%3a1.2.8-6ubuntu1.2_amd64.deb ...
Unpacking nfs-common (1:1.2.8-6ubuntu1.2) ...
Processing triggers for man-db (2.6.7.1-1) ...
Processing triggers for ureadahead (0.100.0-16) ...
Setting up nfs-common (1:1.2.8-6ubuntu1.2) ...

Creating config file /etc/idmapd.conf with new version

Creating config file /etc/default/nfs-common with new version

statd start/running, process 1862
gsssd stop/pre-start, process 1896
idmapd start/running, process 1941
Processing triggers for ureadahead (0.100.0-16) ...

joe@ldap2:~$
```
joe@ldaps-client:~$ getent passwd eskeleto
eskeleto:x:11000:11000:F. Eskeleto,,,:/home/eskeleto:/bin/bash
joe@ldaps-client:~$ echo "Note where his home directory is at"
Note where his home directory is at
joe@ldaps-client:~$ 
```
We will move our local users directory

```
$ cat /etc/passwd | grep joe
```

do not paste

```
joe:x:1001:1001::/home/joe:/bin/bash
```

```
joe@ldaps-client:~$ sudo vi /etc/passwd
/etc/passwd" 25L, 1190C written
joe@ldap2:~ $ cd /
joe@ldap2:/~ $ sudo mkdir /home.00
joe@ldap2:/~ $ sudo mv /home/joe/ /home.00/
joe@ldap2:/~ $ ls /home.00/

joe
joe@ldap2:/~ $ ls /home.00/ -l
total 4
drwxr-xr-x 3 joe joe 4096 Feb 3 13:40 joe

joe@ldap2:/~ $
joe@ldap2:~$ echo "logged out and back in to test my local user"
logged out and back in to test my local user
joe@ldap2:~$ pwd
/home.00/joe
joe@ldap2:~$
Now mount the nfs share under /home

what mounts are available?

Export list for 144.38.220.200:
/user_homes 144.38.220.192/27
/foo 144.38.220.212,144.38.220.211
/data/images 144.38.220.211

[sudo] password for joe:
joe@ldap2:~ $ cd /home
joe@ldap2:/home$ ls
joe@ldap2:/home$ sudo mkdir eskeleto
joe@ldap2:/home$ sudo chown eskeleto:eskeleto eskeleto/
joe@ldap2:/home$ ls -la
  total 12
  drwxr-xr-x  3 root  root  4096 Feb  3 13:45 .
  drwxr-xr-x 23 root  root  4096 Feb  3 13:41..
  drwxr-xr-x  2 eskeleto eskeleto 4096 Feb  3 13:45 eskeleto
joe@ldap2:/home$
Server side view

```
$ ls -l /user_homes/
total 4
drwxr-xr-x 2 11000 11000 4096 Feb 3 13:45 eskeleto
```

If you don't want to see the uid/gid here, make the nfs server an ldap client as well

```
$ echo "If you don't want to see the uid/gid here, make the nfs server an ldap client as well"
```

eskeleto@ldaps-client:/home$ su - eskeleto
Password:
eskeleto@ldaps-client:~$ pwd
/home/eskeleto
eskeleto@ldaps-client:~$ touch eskeletos_file.txt
eskeleto@ldaps-client:~$ ls -la
ls: cannot access eskeletos_file.txt: No such file or directory
joe@nfss:~$ ls /user_homes/
eskeleto
joe@nfss:~$ ls /user_homes/eskeleto/
eskeletos_file.txt
joe@nfss:~$ ls /user_homes/eskeleto/ -la
total 8
drwxr-xr-x 2 11000 11000 4096 Feb 3 14:18 ..
drwxr-xr-x 3 root root 4096 Feb 3 13:45 ...
-rw-rw-r-- 1 11000 11000 0 Feb 3 14:18 eskeletos_file.txt
joe@nfss:~$