An EndeavourOS based Simple Home Server.

SAMBA

The first thing necessary is to obtain the work group your Windows computers are assigned to. In a Windows computer, Right click on "This PC" then click on "Properties" and find the workgroup.

If I remember correctly, WORKGROUP is the default work group. On anything that involves security, I hate using any defaults. I am going to call my work group TRESAMIGOS All Windows computers wanting to access the enosServer should have the same work group name. To change a work group name in a Windows computer:
Right click "This PC" then "properties" to the right of the workgroup section click on "Change settings" See this document for the work group naming rules. By convention, all CAPITALLETTERS without any special character is normally used.
https://www.tenforums.com/tutorials/36133-change-workgroup-windows-10-a.html

SSH into enosServer from a from a Terminal window on a Linux Client computer.
$ ssh pshare@enosServer
$ su then change to root using su
#

IN THE SERVER COMPUTER as root.
Install samba packages: # pacman -S samba

ll /etc/samba
total 16
-rw-**r** - - **r**- - 1 root root 8105 Mar 27 03:55 smb.conf

look for a smb.conf file. With EndeavourOS, there probably won't be one. If there is one, check the permissions and ownership compared to above.

To get the missing smb.conf file.
In the Linux Client Computer, with Firefox, goto https://git.samba.org/samba.git/?p=samba.git;a=blob_plain;f=examples/smb.conf.default;hb=HEAD Click on "File" and "SavePage As" In the SAVE AS screen select folder to save to (Downloads is fine) change Name: to smb.conf make sure in the lower left it shows "plain text document" then Save. This process will convert the HTML file shown in Firefox to a text file then save it.

Still in the Client computer, open a new terminal window. Should show user@clienthostname
$ cd to Downloads (or whatever folder you put smb.conf in)
$ scp smb.conf pshare@enosServer:/home/pshare

$ ssh pshare@enosServer

$ ll /home/pshare
-rw-r--r-- 1 pshare pshare 7188 Jan 8 19:04 smb.conf
$ su
  enter root passwd
cp /home/pshare/smb.conf /etc/samba
cd /etc/samba
ll
drwx- - - - - - 2 root root 4096 Nov 14 16:20 private
-rw-r- - r- -   1 root root 7933 Jan 8 19:48 smb.conf

Permissions and owners of smb.conf should be -rw-r- -r- - and root root
If not, use chown and chmod to fix it.

This method of simply getting an external file into the inner workings of the OS demonstrates the security involved. But in the end, it all revolves around how secure your passwords are. All the security in the world won't help you if your username password is abcd and your root password is 1234

We have all our necessary config files in place.
An important quote from the smb.conf file

Any line which starts with a ; (semi-colon) or a # (hash)
is a comment and is ignored. In this example we will use a
for commentry and and a ; for parts of the config file that you
may wish to enable
#
NOTE: Whenever you modify this file you should run the command "testparm"
to check that you have not made any basic systectic errors.

Still IN THE Client computer ssh'ed into enosServer computer
vi /etc/samba/smb.conf

read all the comment lines at the beginning of the file then find the following lines

```
#================== = Global Settings=====================
[global]

# workgroup = NT-Domain-Name or Workgroup-Name, eg: MIDEARTH
   workgroup = MYGROUP
```

Change workgroup = WORKGROUP to workgroup = YOURWORKGROUPNAME

Still in "Global Settomgs" Find the following line

```
;   hosts allow = 192.168.1. 192.168.2. 127.
```

Remove the leading semi-colon to enable this line then change to
  hosts allow = 127. 192.168.0.

The 192.168.0. is the static IP address we assigned to this enosServer computer, minus the the last triad. This means any computer with an IP address that starts with 192.168.0. is allowed to connect. Any computer not on our LAN block is not allowed. The 127. allows any local loopbacks for testing and/or troubleshooting.

Add the following lines at the very end of this smb.conf file

```
[SMBshare]
comment = Samba Share
path = /server
valid users = pshare
public = no
writeable = yes
printable = no
create mask = 0765
```

Close the editor.
After editing, test the changes that were made.
testparm

Should not be any errors.

Above we set up a Samba share named SMBshare, told it which directory we are sharing, and allowed ONLY user pshare to be a valid user. The SMBshare is case sensitive when we configure the Windows computers. Next we need to set up a Samba account for user pshare.

Still ssh-ed into the enosServer computer as root
smbpasswd -a pshare
   New SMB password: EnterAPassword
   Retype new SMB password: Re-enter the same password

password can be whatever you want and does not need to be an existing password.

Next we set up the server's firewall for samba.
ufw allow from 192.168.0.0/24 to any port 445
ufw allow from 192.168.0.0/24 to any port 137
ufw allow from 192.168.0.0/24 to any port 138
ufw allow from 192.168.0.0/24 to any port 139
ufw status
Status: active

To	Action	From
9XXX	ALLOW	192.168.0.0/24
445	ALLOW	192.168.0.0/24
137	ALLOW	192.168.0.0/24
138	ALLOW	192.168.0.0/24
139	ALLOW	192.168.0.0/24

Now we need systemd to start up the services at boot up.
systemctl enable smb.service
systemctl enable nmb.service
systemctl start smb.service
systemctl start nmb.service

Restart the enosServer computer
reboot

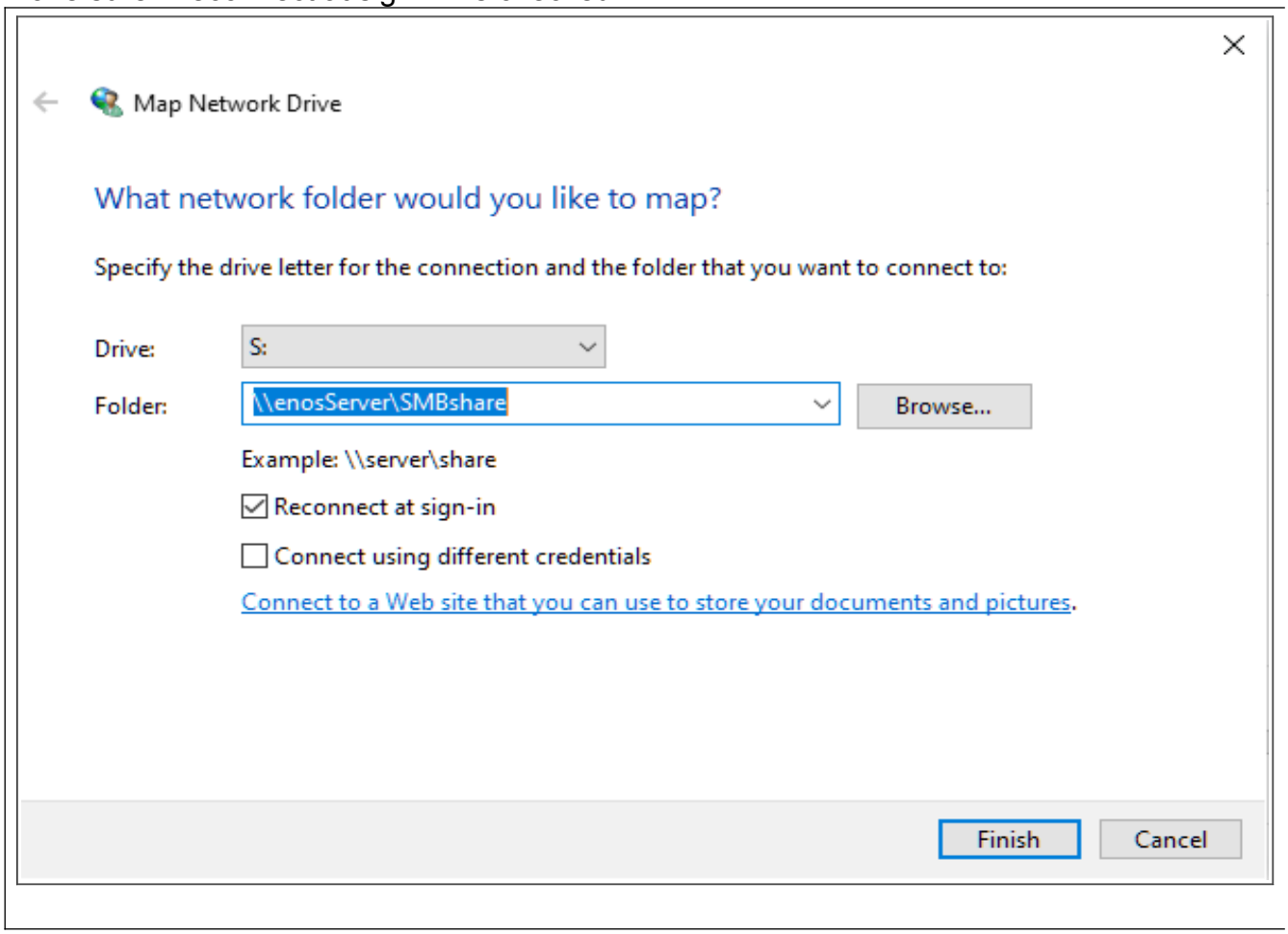
SETTING UP A WINDOWS CLIENT COMPUTER

IN A WINDOWS COMPUTER

Click on the “This PC” icon, Then click on “Map Network Drive” to get the following:

in the “Drive” pull down, select S: for the drive letter to mount Samba Share to, or any other drive letter of your choice.

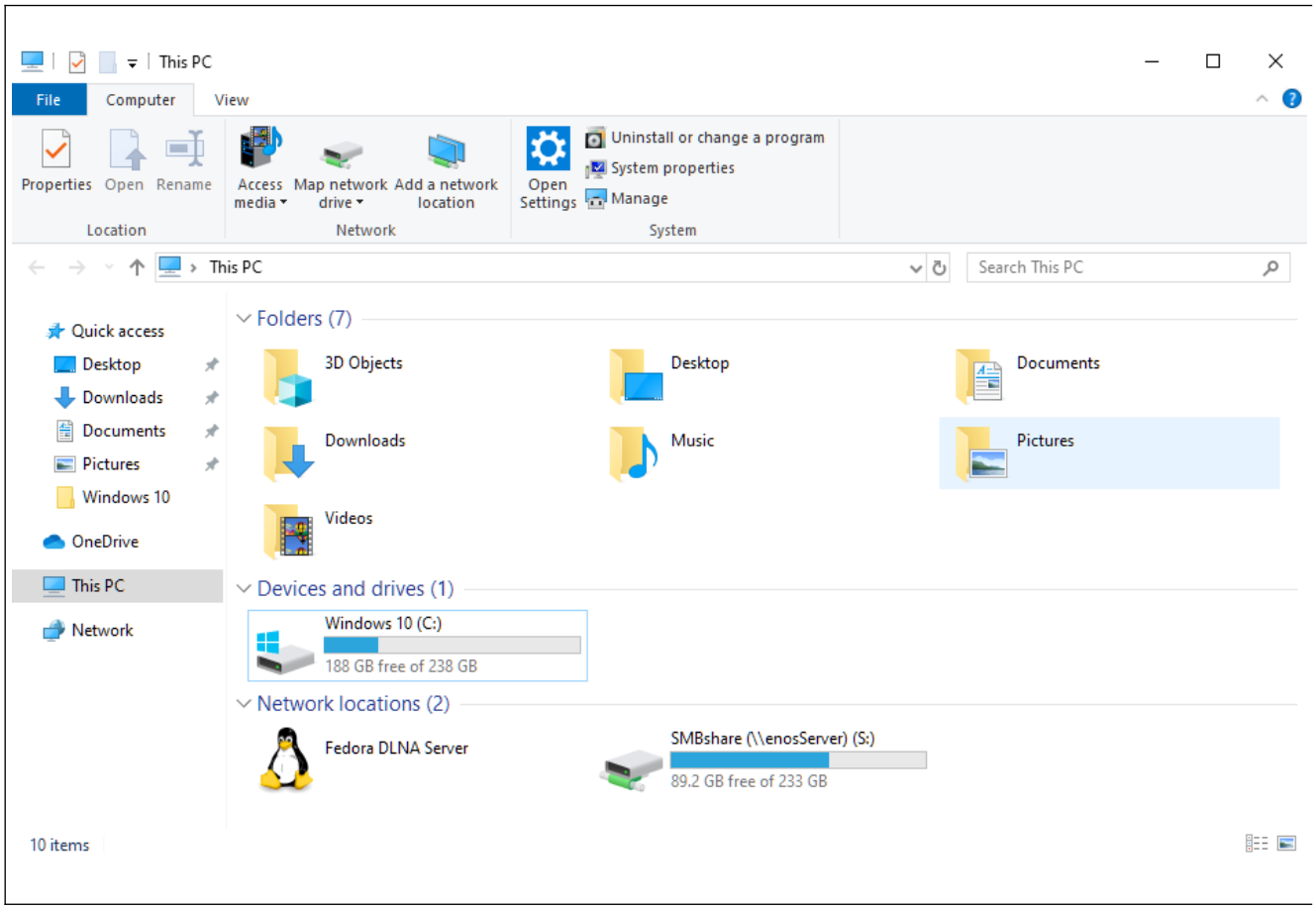
In the “Folder” pulldown enter \\enosServer\SMBshare (SMBshare part is case sensitive)
Make sure “Reconnect at sign-in” is checked



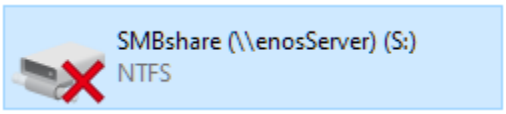
Click Finish
You will get a dialog box saying Trying to connect

Then a box asking for username and password. Enter pshare for user and pshare's Samba password that we entered with # smbpasswd -a pshare
Make sure “Remember my credentials” is checked.

Go back to “This PC” and in addition to Local Disk (C:) you should see the SMBshare mounted as Drive S: under the Network Locations header.



If you have the SMBshare mounted and listed as above. Power off and restart Windows and see if the SMBshare is automatically mounted after logging in. If it automatically mounts at boot up, we are done with Samba. Sometimes after login, the Icon for enosServer will look like the following.



Just double click on it, and it will usually go find the enosServer and mount it.

Now Setup any other Windows machines in the exact same manner.