Welcome to Week 11!

Warmup:

https://forms.gle/KFeY YhDa6JWm2QGz7



Samba

no not that kind



Before Samba, what is mounting?

Mounting means that you have some kind of external or compressed filesystem (usually) that you want to get data from. Basically what you want to do is say "Hey Linux, please let this non-me data be accessible to me." It's quite simple, just do:

sudo mount -o <thing to mount > <place to mount to>

You may need to mount things in competition, but Samba doesn't require it because it is online.

What is Samba?

Suite of Unix apps that provides secure and stable file and print services, mostly used for file sharing

Follows SMB protocol (Server Message Block)

Useful for sharing files between Windows and Linux

Windows equivalent - Active Directory (network shares) and Domain Controller (security auth)

Runs on port 445

How Samba?

- Install Samba (duh 4head)
- 2. Make share folder on server
- 3. Configure /etc/samba/smb.conf
- 4. Setup user accounts w/ passwords
- 5. Access via a file manager

Install Samba

sudo apt-get install samba

go to /mnt

mkdir a directory named sambashare

should now be a dir named /mnt/sambashare

(NOTE: the share does not need to be named sambashare)

add a bunch of rando files in there

Config

Config file is /etc/samba/smb.conf

Many parts: homes, printers, global, shares, personalised share configs

[global] configures behavior of server in general

[printers] goes over printers

[shares] configure file shares, [homes] and personalized shares are the same but just more specific

There are 3 kinds of shares

global - defines what happens when people access you private - not accessible unless given access public - share that people can specifically request

Usually public shares make the most sense

Adding a share

at the end of the file add a section for sambashare

then add these lines

- comment = Samba on Ubuntu
- path = /mnt/sambashare
- read only = no
- browseable = yes

then restart the smbd service

Testing it works

NOTE: semicolons (;) in smb.conf are equivalent to # meaning they are both comments

To test if smb.conf has any errors:

testparm

If nothing shows up then you should be ok

How to connect to a share

Add a user for samba (sudo adduser sambauser)

Don't forget to give them a password

Add that user to samba

sudo smbpasswd -a sambauser

The -a means add the user

(to delete a user use -x instead)

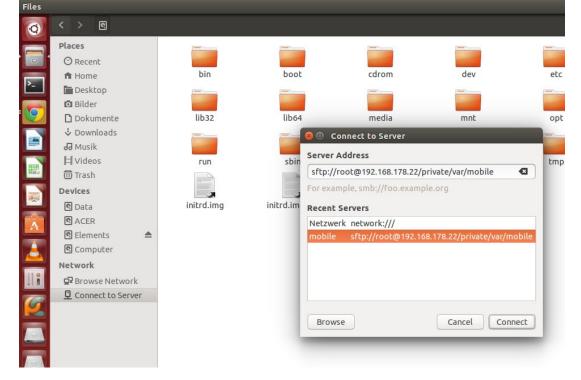
How to connect

ifconfig (look for your ip address)

it should say 127.0.0.1 in this case

uwu what is this?

run the command nautilus (this is file explorer)



Clicc on "Connect to Server"

In the "Server Address" bar put

smb://sambauser@127.0.0.1/sambashare

Sharing is caring

Put in the password for sambauser

You should be able to now read and edit the files you put in the server earlier. Yippee!

(NOTE: the general syntax to connect is

smb://<username>@<ip address>/<name of the share in smb.conf>



Configs pt2

electric boogaloo

Samba configs explained

write ok - editable files/directory (writeable)

read only - can only read files

valid users - list of users ok to login (or a @group)

guest ok - login password not needed (public vs private share)

browseable - can explore other directories in share

copy/template - copy configs from a template share

Things to thonk about

create mask - what permissions files created during a samba session have by default. What do you think it should be?

also, what do you think this does?

[sharing]

path = /

Tips

Look at your shares

Delete unnecessary shares

Be careful with what's commented

README

Remember to READ the README cuz like sometimes it'll be like "do this" or "do that" and we are not psychics (wow who woulda thought) and we do not know 100% what will happen. You can't blame us if they are like "do it this way" but suggested another. If they want Samba shares insecure, great.