

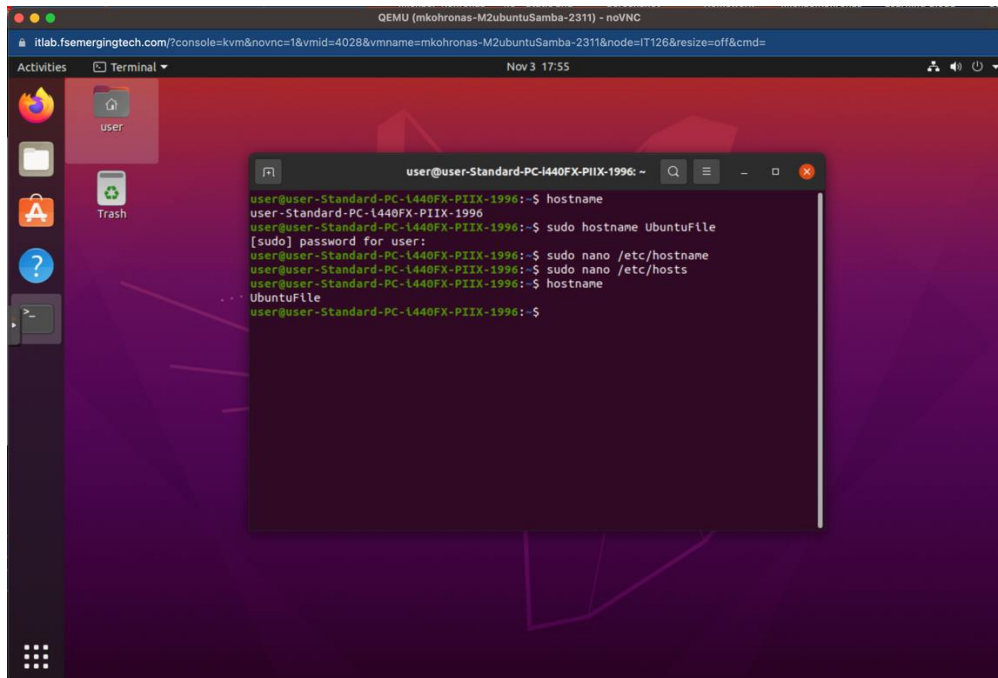
Samba File Server

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10/30/2023
Project Portfolio: III

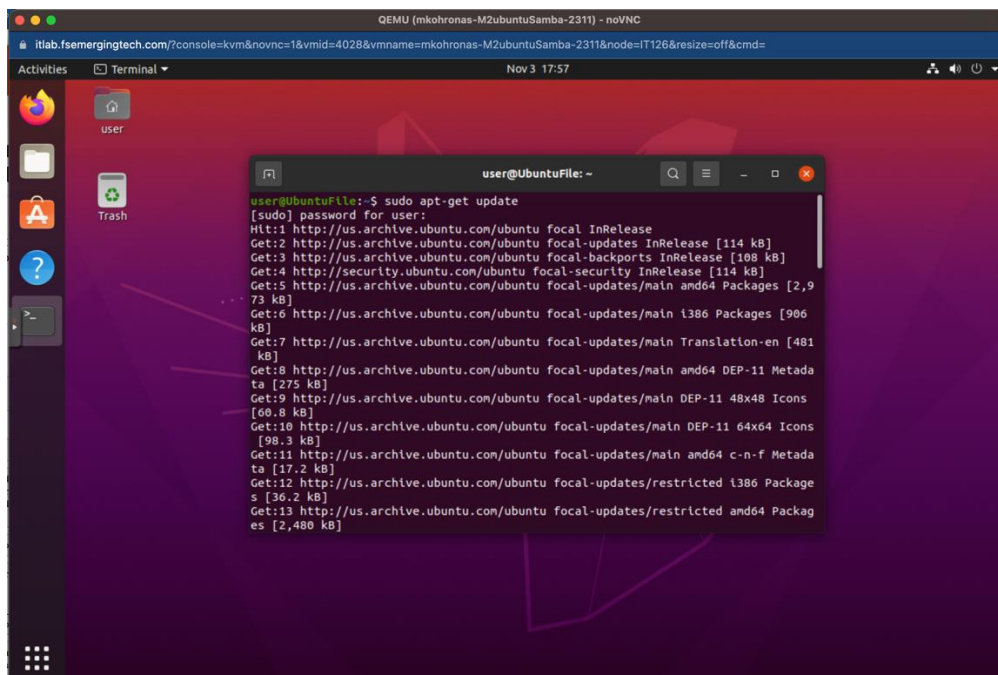
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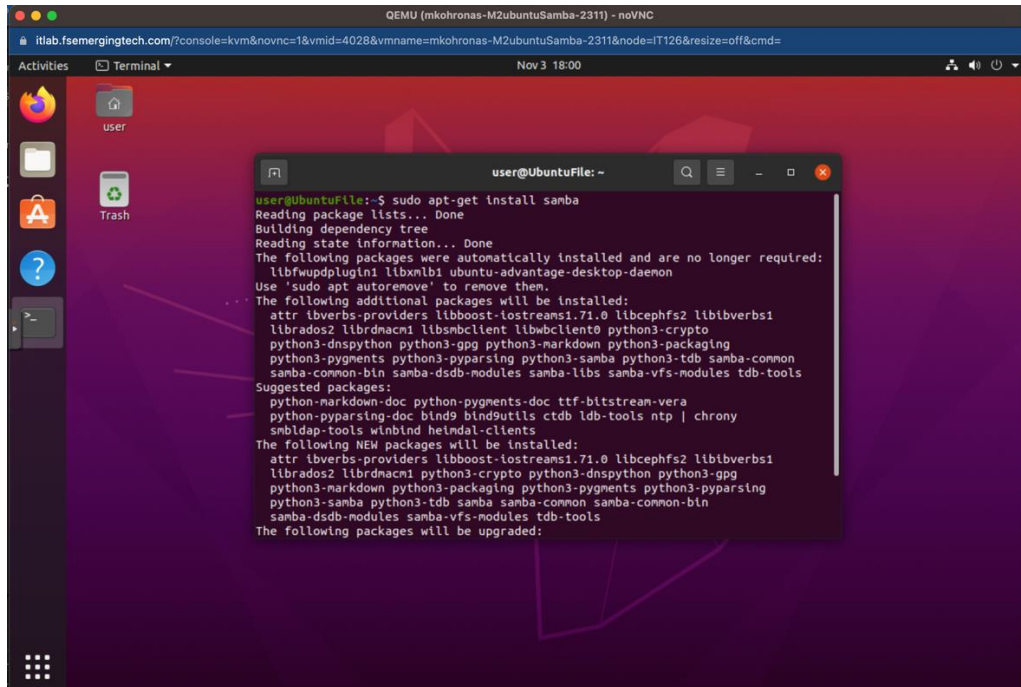
Step 1: Change hostname of VM –



Step 2: Make sure ubuntu is updated –

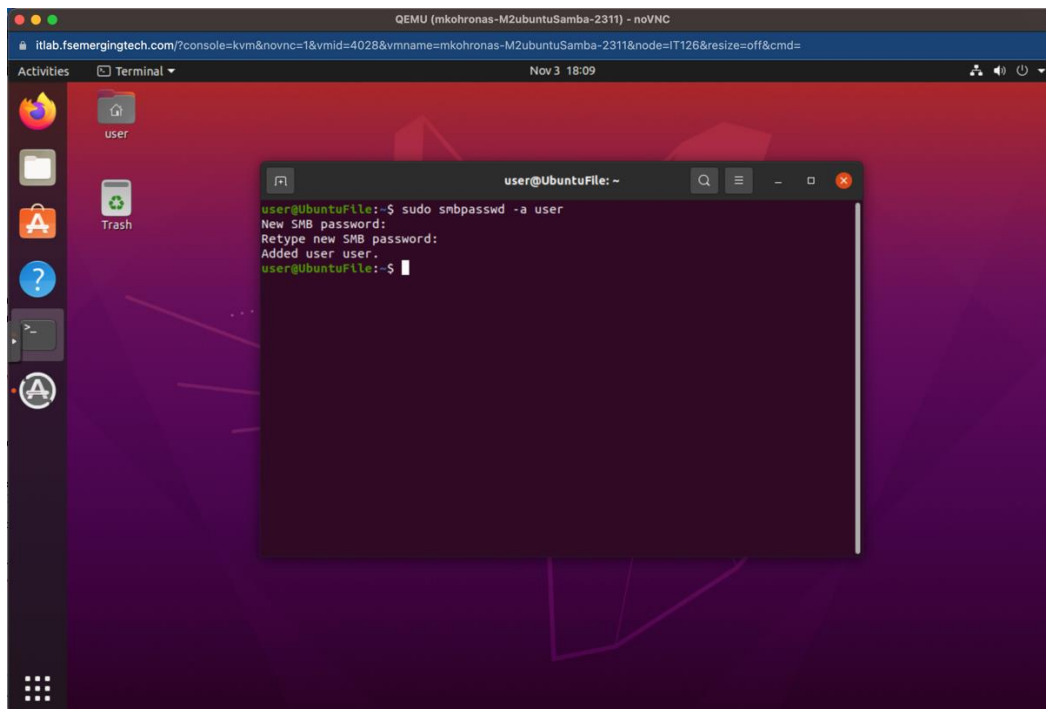


Step 3: Install Samba Server



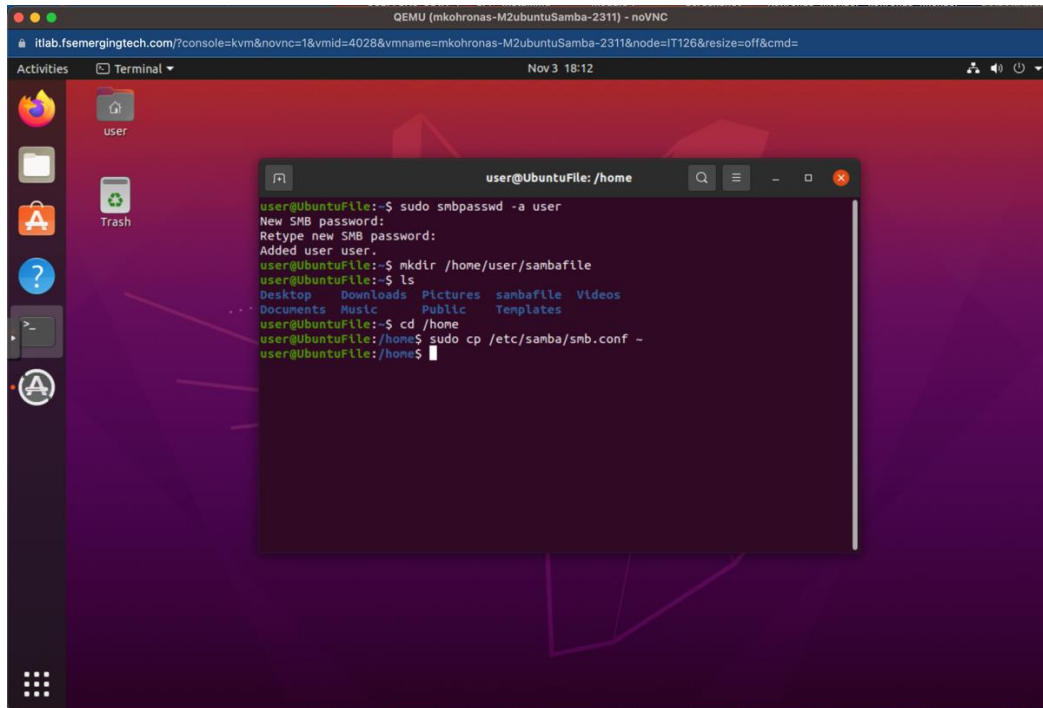
```
user@UbuntuFile:~$ sudo apt-get install samba
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libfwupdplugin1 libxmb1 ubuntu-advantage-desktop-daemon
Use 'sudo apt autoremove' to remove them.
...
The following additional packages will be installed:
  attr ibverbs-providers libboost-tostreams1.71.0 libcephfs2 libibverbs1
  librados2 librdmacni1 libsmclient libwbclient0 python3-crypto
  python3-dnspython python3-gpg python3-markdown python3-packaging
  python3-pygments python3-pyparsing python3-samba python3-tdb samba-common
  samba-common-bin samba-dsdb-modules samba-libs samba-vfs-modules tdb-tools
Suggested packages:
  python-markdown-doc python-pygments-doc ttf-bitstream-vera
  python-pyparsing-doc bind9 bind9utils ctdb ldb-tools ntp | chrony
  smbldap-tools winbind heimdal-clients
The following NEW packages will be installed:
  attr ibverbs-providers libboost-tostreams1.71.0 libcephfs2 libibverbs1
  librados2 librdmacni1 python3-crypto python3-dnspython python3-gpg
  python3-markdown python3-packaging python3-pygments python3-pyparsing
  python3-samba python3-tdb samba samba-common samba-common-bin
  samba-dsdb-modules samba-vfs-modules tdb-tools
The following packages will be upgraded:
```

Step 4: Create a samba user and password associated with the user “user” on the ubuntu machine.



```
user@UbuntuFile:~$ sudo smbpasswd -a user
New SMB password:
Retype new SMB password:
Added user user.
user@UbuntuFile:~$
```

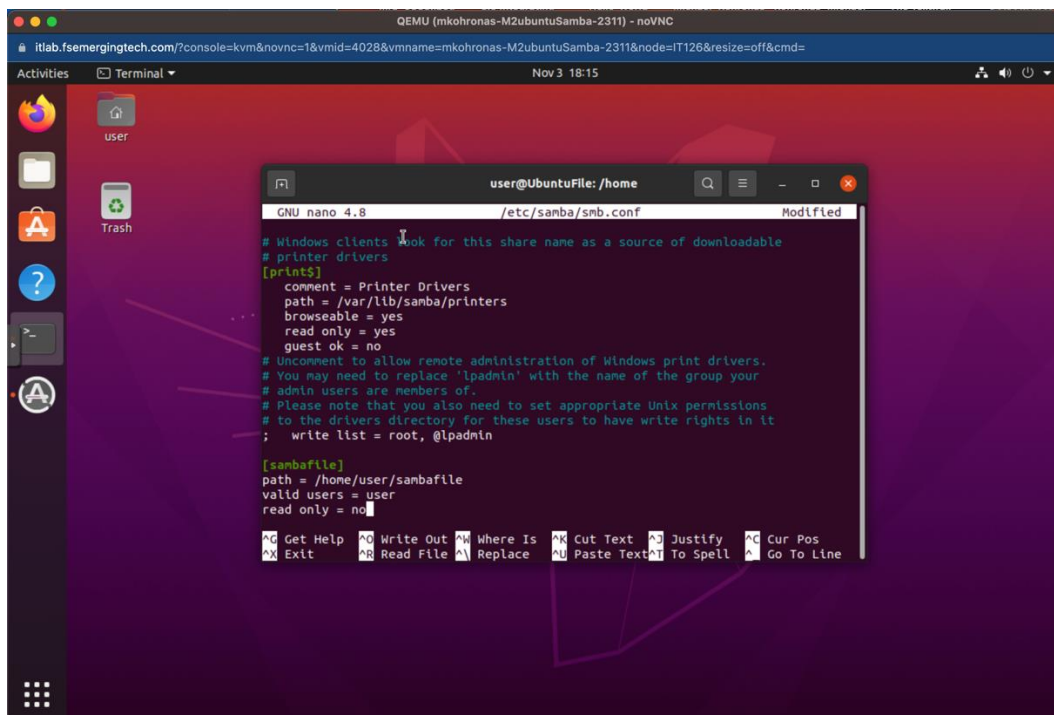
Step 5: Create a folder for samba and create a backup.



The screenshot shows a terminal window titled 'user@UbuntuFile: /home' with the following commands and output:

```
user@UbuntuFile:~$ sudo smbpasswd -a user
New SMB password:
Retype new SMB password:
Added user user.
user@UbuntuFile:~$ mkdir /home/user/sambafile
user@UbuntuFile:~$ ls
Desktop  Downloads  Pictures  sambafile  Videos
Documents  Music      Public    Templates
user@UbuntuFile:~$ cd /home
user@UbuntuFile:~/home$ sudo cp /etc/samba/smb.conf ~
user@UbuntuFile:~/home$
```

Step 6: Create a share for the samba folder:

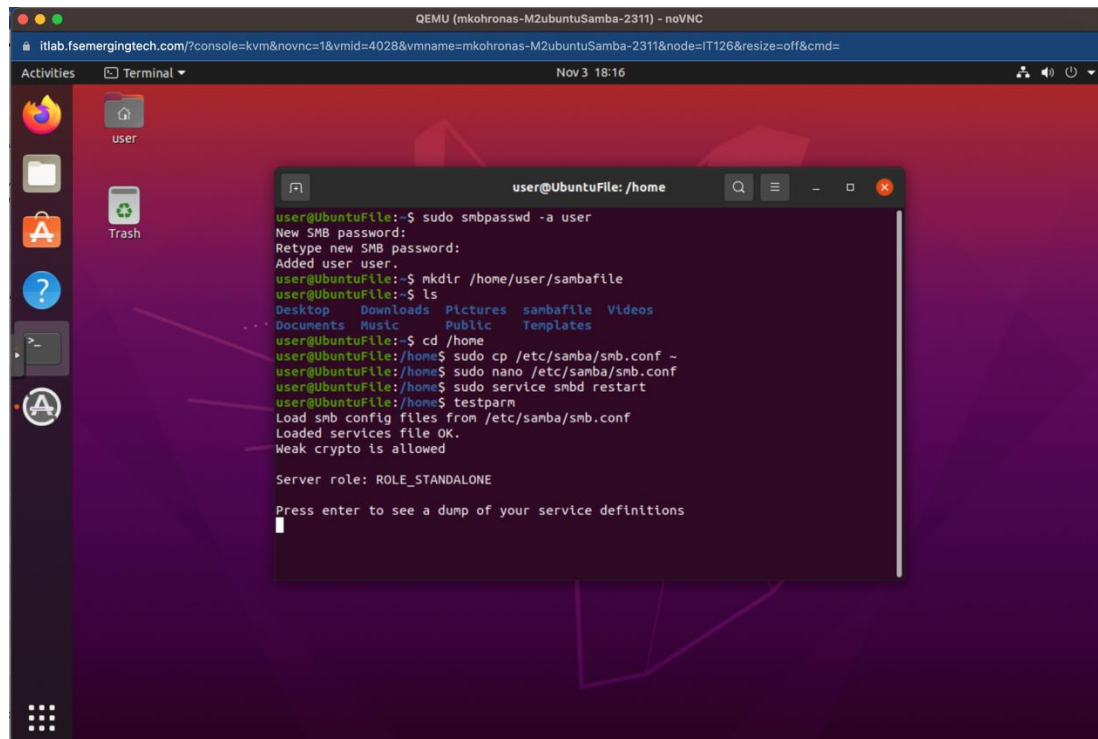


The screenshot shows a terminal window titled 'GNU nano 4.8 /etc/samba/smb.conf' with the following configuration:

```
# Windows clients look for this share name as a source of downloadable
# printer drivers
[print$]
comment = Printer Drivers
path = /var/lib/samba/printers
browseable = yes
read only = yes
guest ok = no
# Uncomment to allow remote administration of Windows print drivers.
# You may need to replace 'lpadmin' with the name of the group your
# admin users are members of.
# Please note that you also need to set appropriate Unix permissions
# to the drivers directory for these users to have write rights in it
; write list = root, @lpadmin

[sambafile]
path = /home/user/sambafile
valid users = user
read only = no
```

Step 7: Restart the smbd service and testparm for the service to make sure code is working

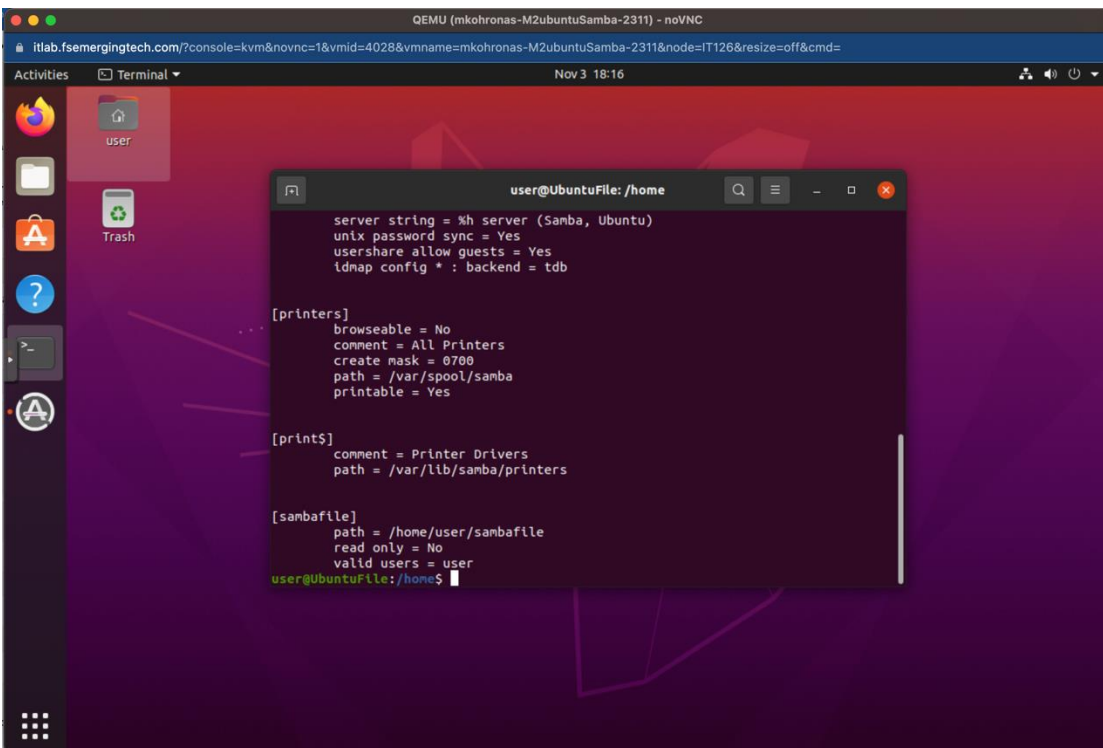


The screenshot shows a QEMU terminal window titled "QEMU (mkohronas-M2ubuntuSamba-2311) - noVNC". The terminal output shows the following commands and their results:

```
user@UbuntuFile:~$ sudo smbpasswd -a user
New SMB password:
Retype new SMB password:
Added user user.
user@UbuntuFile:~$ mkdir /home/user/sambafile
user@UbuntuFile:~$ ls
Desktop  Downloads  Pictures  sambafile  Videos
Documents  Music      Public    Templates
user@UbuntuFile:~$ cd /home
user@UbuntuFile:/home$ sudo cp /etc/samba/smb.conf -
user@UbuntuFile:/home$ sudo nano /etc/samba/smb.conf
user@UbuntuFile:/home$ sudo service smbd restart
user@UbuntuFile:/home$ testparm
Load smb config files from /etc/samba/smb.conf
Loaded services file OK.
Weak crypto is allowed

Server role: ROLE_STANDALONE

Press enter to see a dump of your service definitions
```



The screenshot shows the same QEMU terminal window, now displaying the output of the `testparm` command. The output shows the configuration for the Samba server, including the server string, unix password sync, usershare allow guests, idnap config, printers, and sambafile sections.

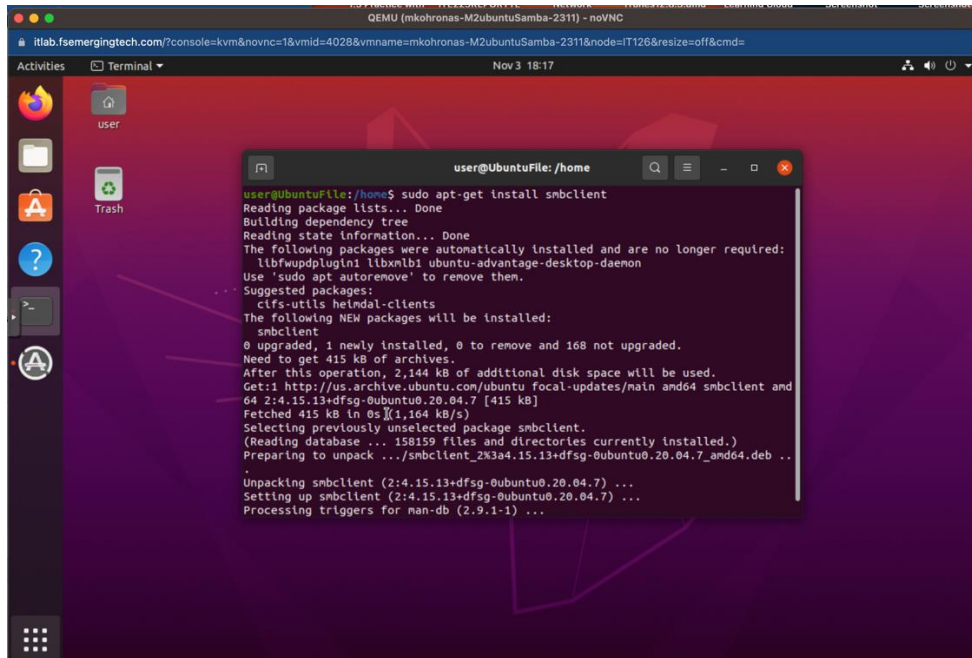
```
server string = %h server (Samba, Ubuntu)
unix password sync = Yes
usershare allow guests = Yes
idnap config * : backend = tdb

[printers]
browseable = No
comment = All Printers
create mask = 0700
path = /var/spool/samba
printable = Yes

[print$]
comment = Printer Drivers
path = /var/lib/samba/printers

[sambafile]
path = /home/user/sambafile
read only = No
valid users = user
user@UbuntuFile:/home$
```

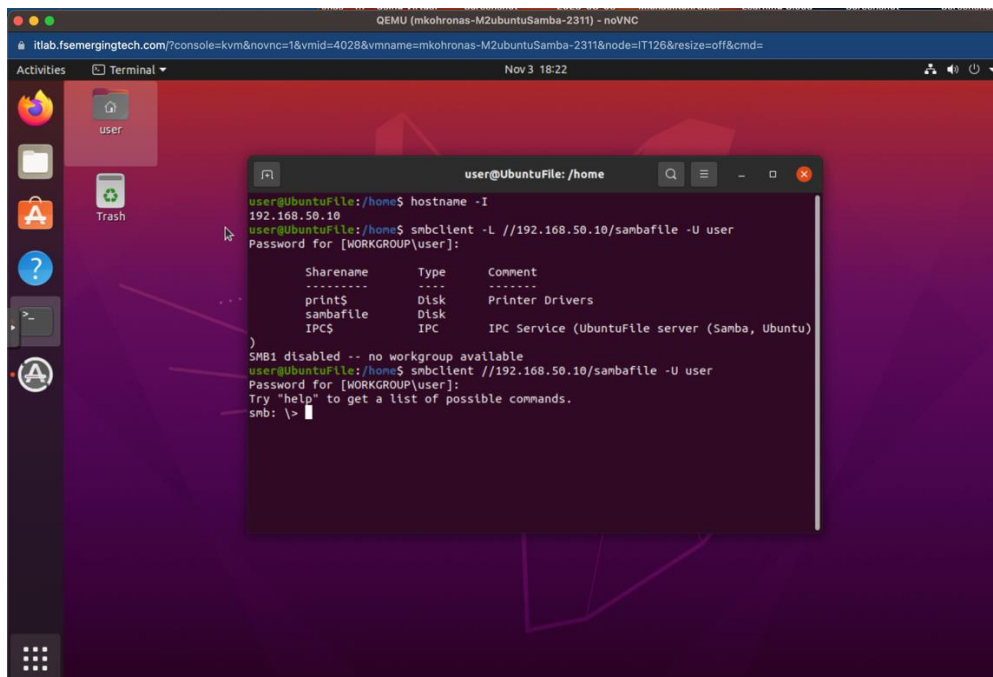
Step 8: Install the SMBD client



A terminal window titled 'user@UbuntuFile: /home' showing the command 'sudo apt-get install smbclient' and its output. The output indicates that the package is being installed, with details about disk space and package sources. The terminal is part of a desktop environment with a sidebar on the left containing icons for Activities, user, Trash, and other applications. The background is a dark purple Ubuntu desktop.

```
user@UbuntuFile:/home$ sudo apt-get install smbclient
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libfwupdplugin1 libxmlb1 ubuntu-advantage-desktop-daemon
Use 'sudo apt autoremove' to remove them.
Suggested packages:
  cifs-utils heimdal-clients
The following NEW packages will be installed:
  smbclient
0 upgraded, 1 newly installed, 0 to remove and 168 not upgraded.
Need to get 415 kB of archives.
After this operation, 2,144 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 smbclient
and 64 2:4.15.13+dfsg-0ubuntu0.20.04.7 [415 kB]
Fetched 415 kB in 0s (1,164 kB/s)
Selecting previously unselected package smbclient.
(Reading database ... 158159 files and directories currently installed.)
Preparing to unpack .../smbclient_2%3a4.15.13+dfsg-0ubuntu0.20.04.7_and64.deb ...
Unpacking smbclient (2:4.15.13+dfsg-0ubuntu0.20.04.7) ...
Setting up smbclient (2:4.15.13+dfsg-0ubuntu0.20.04.7) ...
Processing triggers for man-db (2.9.1-1) ...
```

Step 9: find the hostname IP then smb into the server file and check the shares available.



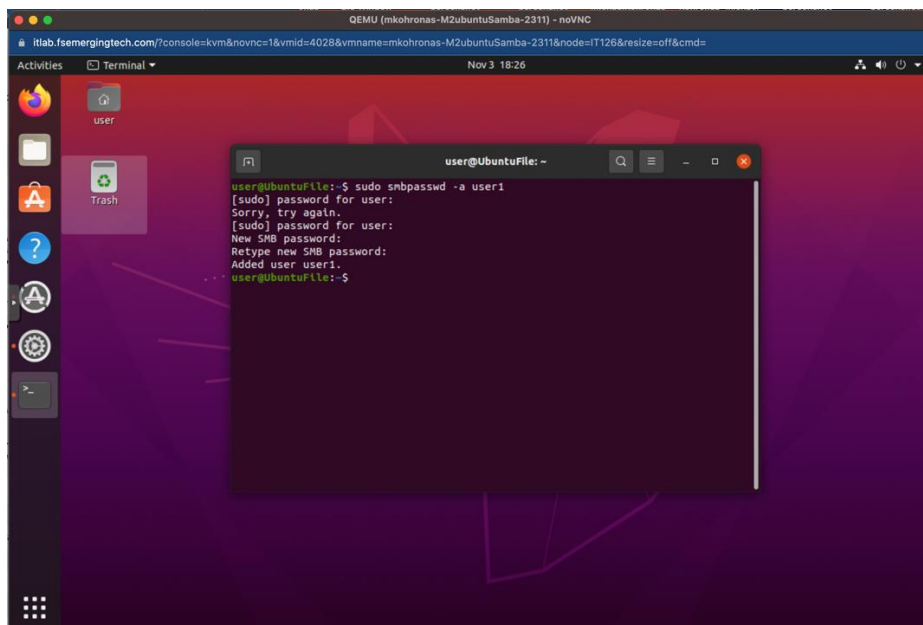
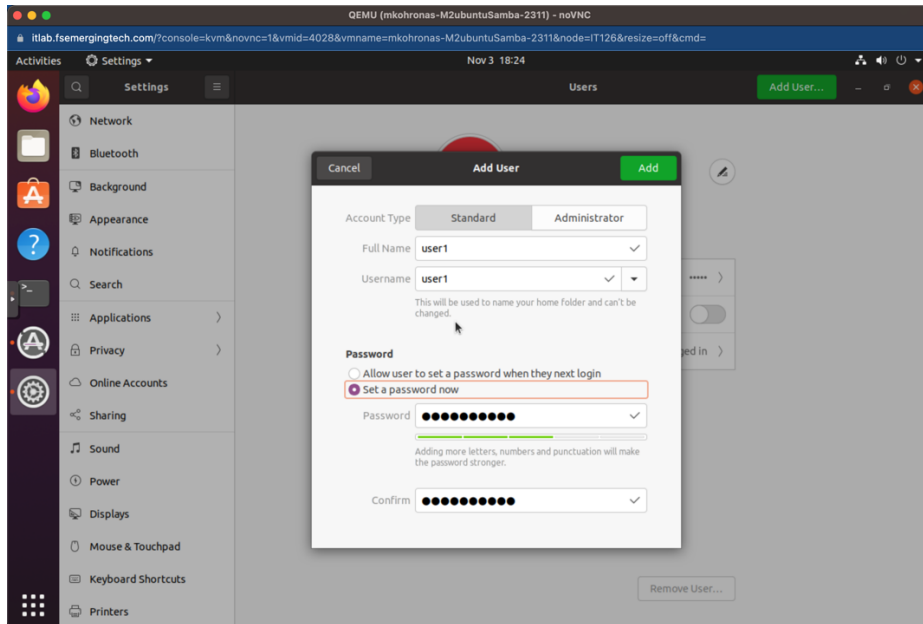
A terminal window titled 'user@UbuntuFile: /home' showing the command 'hostname -I' which returns '192.168.50.10'. Then, the command 'smbclient -L //192.168.50.10/smbafle -U user' is executed, prompting for a password. The output shows a list of shares: 'print\$' (Printer Drivers), 'smbafle' (Disk), and 'IPC\$' (IPC Service). Below this, a message states 'SMB1 disabled -- no workgroup available'. The terminal is part of a desktop environment with a sidebar on the left containing icons for Activities, user, Trash, and other applications. The background is a dark purple Ubuntu desktop.

```
user@UbuntuFile:/home$ hostname -I
192.168.50.10
user@UbuntuFile:/home$ smbclient -L //192.168.50.10/smbafle -U user
Password for [WORKGROUP\user]:

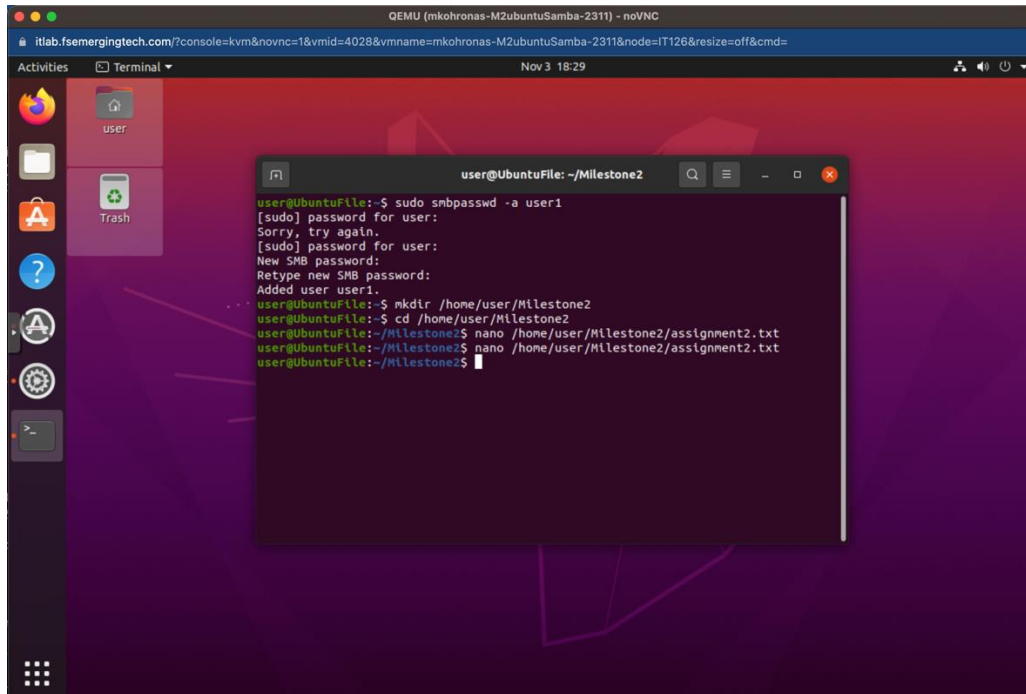
Sharename      Type      Comment
-----
print$         Disk      Printer Drivers
smbafle        Disk
IPC$           IPC       IPC Service (UbuntuFile server (Samba, Ubuntu))

SMB1 disabled -- no workgroup available
user@UbuntuFile:/home$ smbclient //192.168.50.10/smbafle -U user
Password for [WORKGROUP\user]:
Try "help" to get a list of possible commands.
smb: \>
```


Step 10: Create user1 and repeat the previous steps

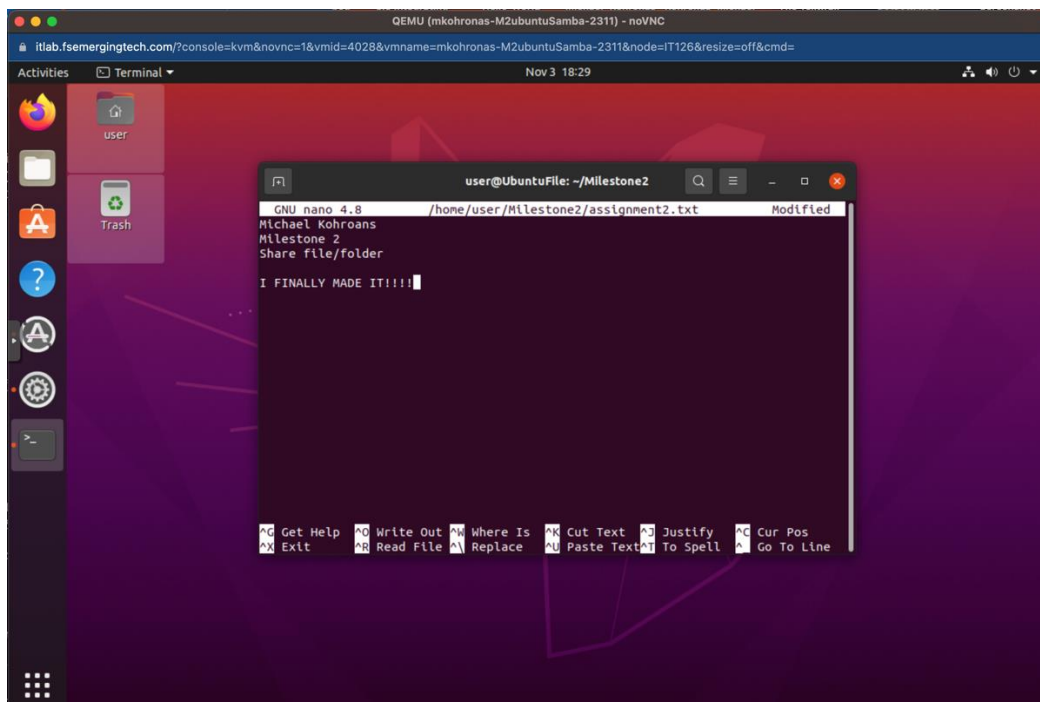


Step 11. Create a milestone 2 folder & assignment2.txt



The screenshot shows a terminal window titled "user@UbuntuFile: ~/Milestone2". The user has executed the following commands:

```
user@UbuntuFile:~$ sudo smbpasswd -a user1
[sudo] password for user:
Sorry, try again.
[sudo] password for user:
New SMB password:
Retype new SMB password:
Added user user1.
user@UbuntuFile:~$ mkdir /home/user/Milestone2
user@UbuntuFile:~$ cd /home/user/Milestone2
user@UbuntuFile:~/Milestone2$ nano /home/user/Milestone2/assignment2.txt
user@UbuntuFile:~/Milestone2$ nano /home/user/Milestone2/assignment2.txt
user@UbuntuFile:~/Milestone2$
```



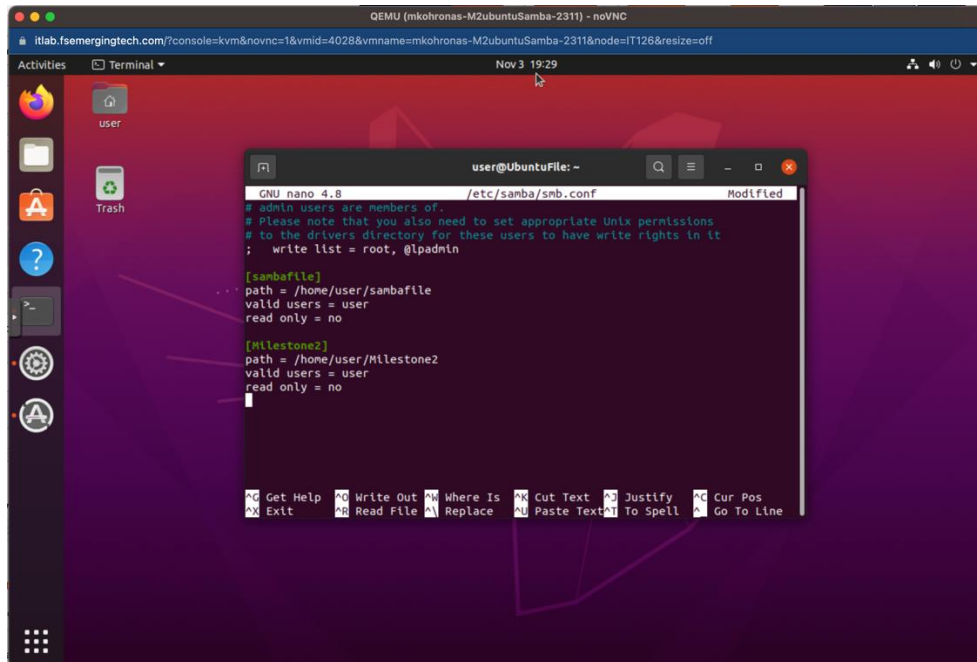
The screenshot shows the same terminal window, but now the file `/home/user/Milestone2/assignment2.txt` is open in the nano editor. The content of the file is:

```
GNU nano 4.8 /home/user/Milestone2/assignment2.txt Modified
Michael Kohroans
Milestone 2
Share file/folder

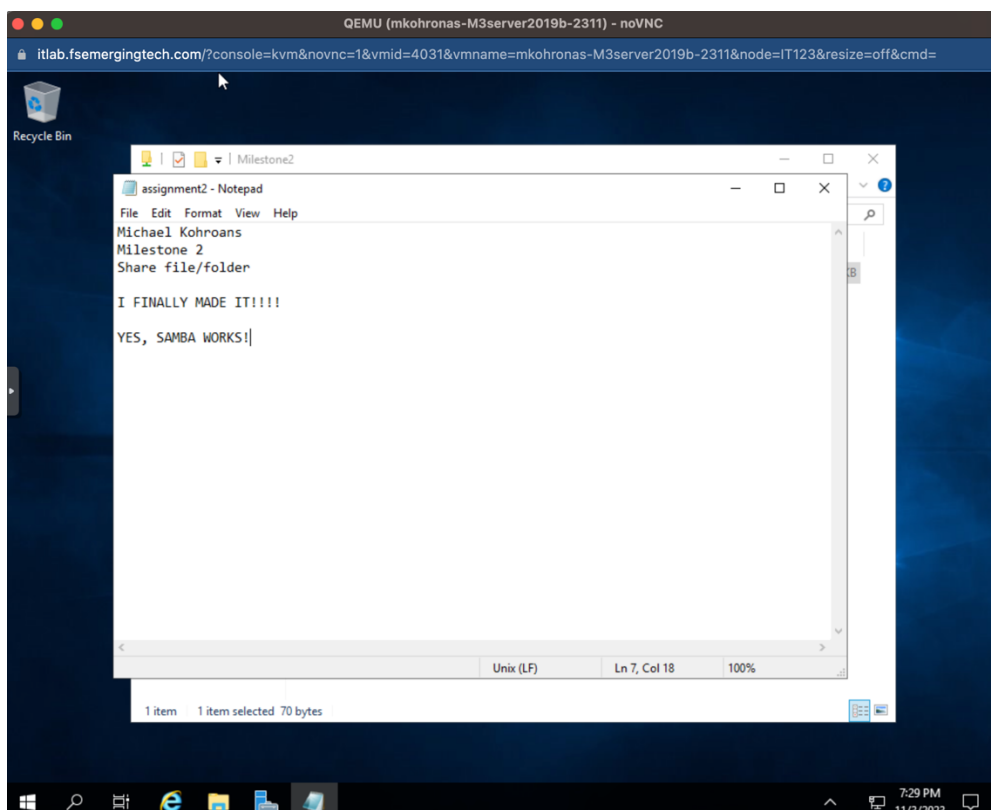
I FINALLY MADE IT!!!
```

The nano editor's status bar at the bottom shows various commands: `Get Help`, `Write Out`, `Where Is`, `Cut Text`, `Justify`, `Cur Pos`, `Exit`, `Read File`, `Replace`, `Paste Text`, `To Spell`, and `Go To Line`.

Step 12: Add permission to the new directory created



Step 13: connect on windows via the run window



Step 14: Confirm it worked by checking the file on the ubuntu machine

```
QEMU (mkohronas-M2ubuntuSamba-2311) - noVNC
itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=4028&vmname=mkohronas-M2ubuntuSamba-2311&node=IT126&resize=off
Activities Terminal Nov 3 19:30
user
Trash
GNU nano 4.8 /home/user/Milestone2/assignment2.txt
Michael Kohroans
Milestone 2
Share file/folder
I FINALLY MADE IT!!!!
YES, SAMBA WORKS!
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^M Replace ^U Paste Text ^T To Spell ^_ Go To Line
```

References:

<https://help.ubuntu.com/community/How%20to%20Create%20a%20Network%20Share%20Via%20Samba%20Via%20CLI%20%28Command-line%20interface/Linux%20Terminal%29%20-%20Uncomplicated%2C%20Simple%20and%20Brief%20Way%21>

[https://help.ubuntu.com/community/How%20to%20Create%20a%20Network%20Share%20Via%20Samba%20Via%20CLI%20\(Command-line%20interface/Linux%20Terminal\)%20-%20Uncomplicated,%20Simple%20and%20Brief%20Way](https://help.ubuntu.com/community/How%20to%20Create%20a%20Network%20Share%20Via%20Samba%20Via%20CLI%20(Command-line%20interface/Linux%20Terminal)%20-%20Uncomplicated,%20Simple%20and%20Brief%20Way)

https://www.youtube.com/watch?v=vyatMj1Z2NQ&ab_channel=TechReview