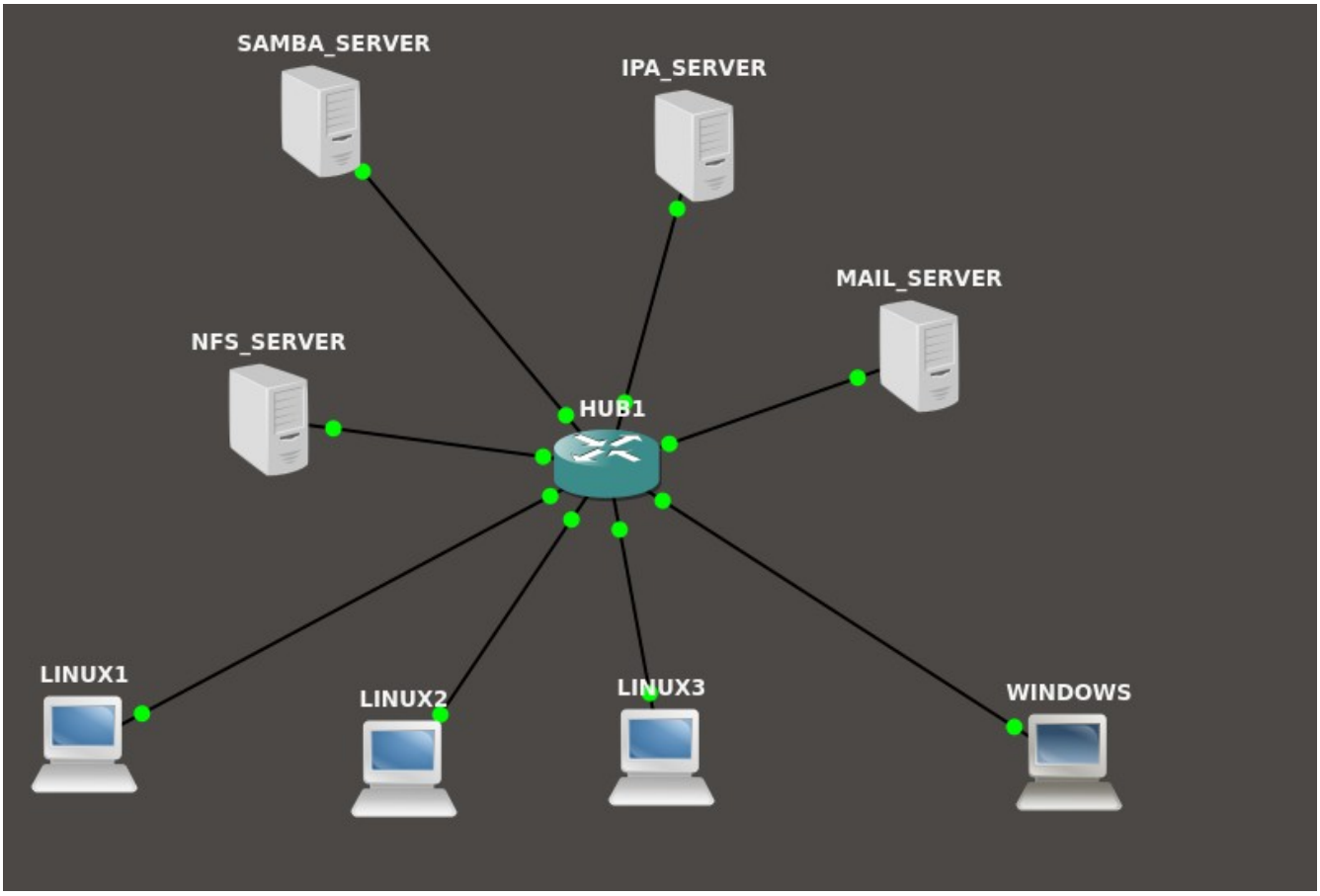
SAMBA SERVER WITH IPA SERVER IN CENTOS 7

installing samba server(server side configuration):

requirements :

1) **Centos server , ip: 192.168.0.50**
2) **client (ubuntu or centos), ip: 192.168.0.100**
3) **internet connection**


SAMBA_SERVER
IPA_SERVER
MAIL_SERVER
NFS_SERVER
HUB1
LINUX1
LINUX2
LINUX3
WINDOWS

step1:

1) Create two user ‘smbuser1’ and ‘smbuser2’ with the IPA server. You can add it with the web interface or with the terminal.[this have to be done with the IPA server]

The samba server have to be a client of the IPA server . We make a client of the IPA server a samba server. And we have to add user from the IPA server and also add this user as a samba client . All the user creation is done by the IPA server. samba server will add the user as a samba user while creating the server.

step2:

update repository and install the necessary samba packages

=> yum update -y
=>yum install samba samba-client samba-common

step3:

Create a directory and give proper permission for that user and group

=>mkdir /share
=>chmod 777 /share

step4:

we have to add the user of the test group to the samba

=>smbpasswd -a smbuser1

=>smbpasswd -a smbuser2

step5:

Configure SElinux .you can either disable the SEinux or set the proper Boolean value and security otherwise it will not let you connect to the server. In this we are not going to disable SElinux we will change the Boolean value.

=> setsebool -P samba_export_all_ro=1 samba_export_all_rw=1
=> getsebool –a | grep samba_export
=> semanage fcontext –at samba_share_t "/share(/.*)?"
=> restorecon /share

```
[root@localhost ~]# setsebool -P samba_export_all_ro=1
[root@localhost ~]# setsebool -P samba_export_all_rw=1
[root@localhost ~]# getsebool -a | grep samba_export
samba_export_all_ro --> on
samba_export_all_rw --> on
[root@localhost ~]# semanage fcontext -at samba_share_t "/share(/.*)?"
[root@localhost ~]# restorecon /share
[root@localhost ~]#
```

step6:

we have to change the firewall settings for allowing the connection

=>firewall-cmd –permanent –add-service=samba

=>firewall-cmd –reload

```
[root@localhost ~]#
[root@localhost ~]# firewall-cmd --permanent --add-service=samba
success
[root@localhost ~]# firewall-cmd --reload
success
[root@localhost ~]#
```

step7:

This is the most important path of the part.we need to edit the configuration of the samba share

=> vim /etc/samba/smb.conf

[share]

comment=Directory for for samba share
browsable=yes
path=/share
writable = no
write list = smbuser1

---

step8:

Test the configuration with the ‘testparm’ command.if there is any error in the configuration this command will tell you that

=>testparm

```
[root@localhost ~]# testparm
Load smb config files from /etc/samba/smb.conf
rlimit_max: increasing rlimit_max (1024) to minimum Windows limit (16384)
Processing section "[homes]"
Processing section "[printers]"
Processing section "[print$]"
Processing section "[share]"
Loaded services file OK.
Server role: ROLE_STANDALONE

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

step9:

restart the samba server to make the change the in effect

=>systemctl start smb

=>systemctl start nmb

```
[root@localhost ~]# systemctl start smb
[root@localhost ~]# systemctl start nmb
[root@localhost ~]#
```

step10:

we have to enable the smb and nmb service to make start this on boot time

=>systemctl enable smb

=>systemctl enable nmb

```
[root@localhost ~]# systemctl enable smb
Created symlink from /etc/systemd/system/multi-user.target.wants/smb.service to
/usr/lib/systemd/system/smb.service.
[root@localhost ~]# systemctl enable nmb
Created symlink from /etc/systemd/system/multi-user.target.wants/nmb.service to
/usr/lib/systemd/system/nmb.service.
[root@localhost ~]#
```

step11:

Test the connection from the server

=>smbclient -L localhost -U smbuser1

```
[root@localhost ~]# smbclient -L localhost -U user1
Enter SAMBA\user1's password:

        Sharename       Type      Comment
        ---------       ----      -------
        print$          Disk      Printer Drivers
        share           Disk      Directory for samba share
        IPC$            IPC       IPC Service (Samba 4.8.3)
        user1           Disk      Home Directories
Reconnecting with SMB1 for workgroup listing.

        Server               Comment
        ---------            -------

        Workgroup            Master
        ---------            -------
        SAMBA                LOCALHOST
[root@localhost ~]#
```

=>smbclient -L localhost -U user2

```
[root@localhost ~]# smbclient -L localhost -U user2
Enter SAMBA\user2's password:

        Sharename       Type      Comment
        ---------       ----      -------
        print$          Disk      Printer Drivers
        share           Disk      Directory for samba share
        IPC$            IPC       IPC Service (Samba 4.8.3)
        user2           Disk      Home Directories
Reconnecting with SMB1 for workgroup listing.

        Server               Comment
        ---------            -------

        Workgroup            Master
        ---------            -------
        SAMBA                LOCALHOST
[root@localhost ~]#
```

installing samba Client(linux client):

step1:

install packages in the client

=>yum update -y

=>yum install samba samba-client samba-common -y

=>yum install cifs-utils -y

step2:

Test the connection from the client

=>smbclient -L 192.168.0.50 -U smbuser1

```
tanvirrahman@pop-os:~
> smbclient -L 192.168.0.50 -U user1
WARNING: The "syslog" option is deprecated
Enter WORKGROUP\user1's password:

        Sharename       Type      Comment
        ---------       ----      -------
        print$          Disk      Printer Drivers
        share           Disk      Directory for samba share
        IPC$            IPC       IPC Service (Samba 4.8.3)
        user1           Disk      Home Directories
Reconnecting with SMB1 for workgroup listing.

        Server               Comment
        ---------            -------

        Workgroup            Master
        ---------            -------
        SAMBA                LOCALHOST
        WORKGROUP            MECHANIC
```

step3:

make the directory for mounting and give the proper permission

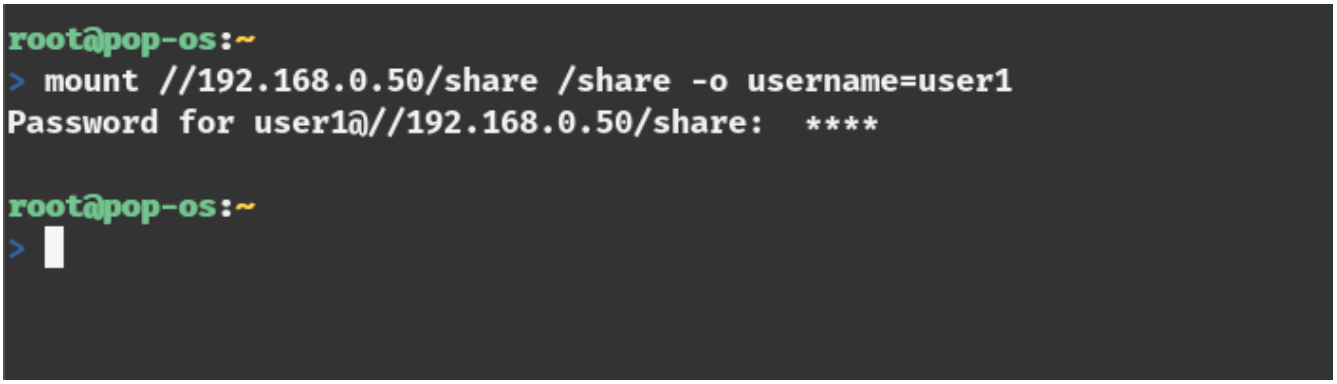
=>mkdir /share

=>chmod 777 /share

step4:

mount the the network share

=>mount //192.168.0.50/share /share -o username=smbuser1



step5:

see the the network share

=>mount | grep cifs

Additional step(permanent mount):

adding a credential file in /share folder

=> vim /share/.smbcredentials

---

username=smbuser1

password=<password_for_user_1>

---

adding an entry to the ‘/etc/fstab’ file

=>vim /etc/fstab

//192.168.0.50/share /share cifs credentials=/share/.smbcredentials

---

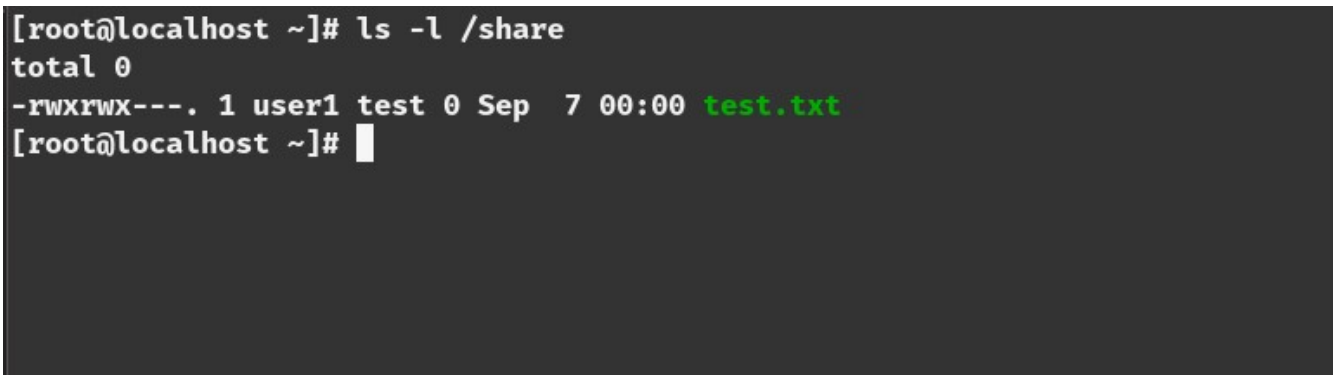
Test the share:

create a file in the /share folder from the client side

=>touch /share/test.txt

Now test from the server side

=>ls -l /share


[root@localhost ~]# ls -l /share
total 0
-rwxrwx---. 1 user1 test 0 Sep 7 00:00 test.txt
[root@localhost ~]#