

LAPORAN JARINGAN KOMPUTER II

SAMBA



Disusun Oleh :

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I. Tujuan Instruksional Khusus

- 1 Mahasiswa mampu melakukan instalasi Samba.
- 2 Mahasiswa dapat melakukan setting pada Samba.
- 3 Mahasiswa mampu manajemen Samba dalam sistem.
- 4 Mahasiswa dapat menghubungkan jaringan Linux dengan jaringan Windows.

II. Dasar Teori

1. Linux merupakan system operasi yang berkonsentrasi sebagai server. Samba adalah salah satu program yang nantinya mampu menangani integritas setiap user yang login pada komputer linux. Untuk dapat menggunakan samba dan dapat berinteraksi dengan windows, computer linux perlu dikonfigurasi. Semua konfigurasi yang akan dilakukan adalah mengenai server linux sendiri. Komputer windows dapat berkomunikasi dengan computer linux dengan menyesuaikan kondisinya dengan komputer linux. Beberapa file yang harus dikonfigurasi berkenaan dengan jaringan adalah:

- a) /etc/hosts
- b) /etc/resolv.conf
- c) /etc/host.conf
- d) /etc/nsswitch.conf

2. File **/etc/hosts**

File /etc/hosts hampir sama dengan tab identification pada windows yang terdapat pada halaman *IP configuration*. File .etc/hosts berfungsi untuk memberikan initial pada komputer atau sebagai pengenalan pada komputer.

Misal, isi file tersebut :

```
root@samba ~# vi /etc/hosts
```

```
# untuk loobacking dan hostname
```

```
127.0.0.1    localhost
```

```
192.168.0.1  samba
```

3. File **/etc/resolv.conf**

File `/etc/resolv.conf` digunakan untuk memberi pengenalan grup pada linux. Istilah yang sering digunakan adalah DNS. Komputer windows dapat berhubungan dengan komputer linux sebagai klien dengan menggunakan nama domain yang telah di *setting* pada komputer linux.

Misal, isi file tersebut :

```
root@samba ~# vi /etc/resolv.conf
```

```
# untuk konfigurasi DNS
```

```
domain      infokom.net
```

```
nameserver  127.0.0.1
```

```
nameserver  192.168.0.1
```

4. File **/etc/nsswitch.conf**

```
root@samba ~# cat /etc/nsswitch.conf
```

```
#
```

```
# /etc/nsswitch.conf
```

```
# passwd:      files nis
```

```
# shadows:     files nis
```

```
# group:       files nis\
```

```
passwd:       compat
```

```
group:        compat
```

```
hosts:        files dns
```

```
networks:     files
```

```
services      files
```

```
protocols:    files
```

```
rpc:          files
```

```
ethers:       files
```

```
netmask:      files
```

```
netgroup:     files
```

```
bootparams:   files
```

```
automount:    files
```

```
aliases       files
```

III. Peralatan yang Digunakan

- 1) PC dengan OS Linux
- 2) CD installer Linux
- 3) Jaringan LAN

IV. Langkah Kerja

1. Sebelumnya install dahulu repository yang di butuhkan...

apt-get install samba-common

```
root@ubuntu: /home/asus
root@ubuntu:/home/asus# apt-get install samba samba-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libwbclient0 smbclient tdb-tools
Suggested packages:
  openbsd-inetd inet-superserver smbldap-tools ldb-tools winbind cifs-utils
The following NEW packages will be installed:
  samba tdb-tools
The following packages will be upgraded:
  libwbclient0 samba-common smbclient
3 upgraded, 2 newly installed, 0 to remove and 325 not upgraded.
Need to get 9,463 kB of archives.
After this operation, 22.7 MB of additional disk space will be used.
Do you want to continue [Y/n]? █
```

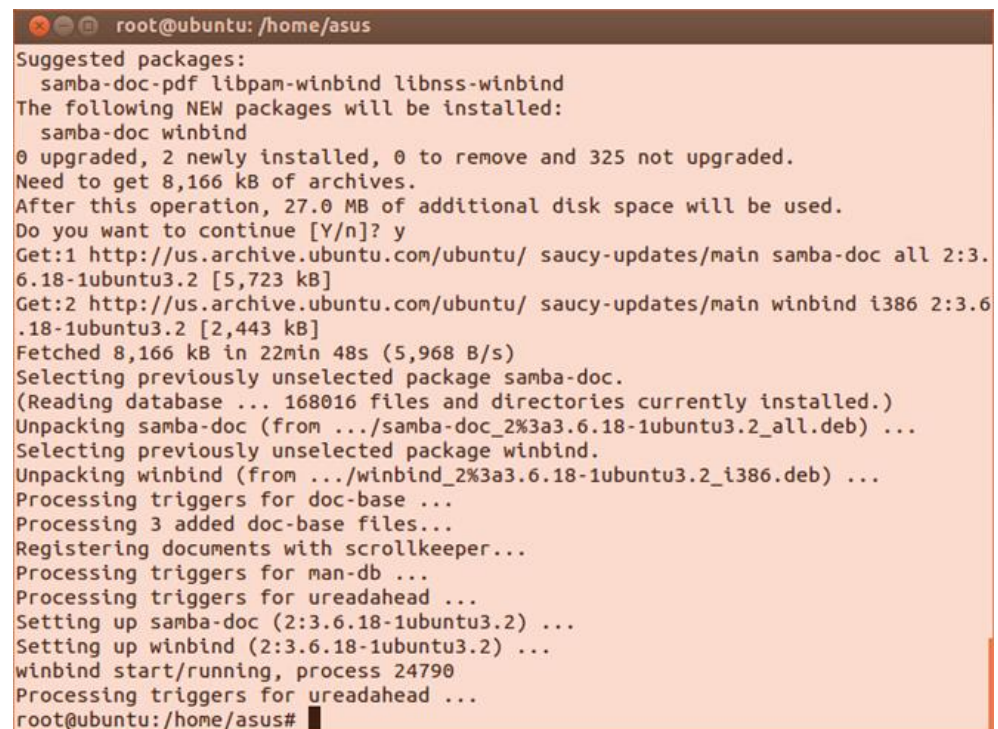
Lanjutan dari proses instalasi

```
root@ubuntu: /home/asus
Selecting previously unselected package tdb-tools.
Unpacking tdb-tools (from ../tdb-tools_1.2.11-2.1_i386.deb) ...
Processing triggers for man-db ...
Processing triggers for ureadahead ...
ureadahead will be reprofiled on next reboot
Processing triggers for ufw ...
Setting up libwbclient0:i386 (2:3.6.18-1ubuntu3.2) ...
Setting up samba-common (2:3.6.18-1ubuntu3.2) ...
Setting up smbclient (2:3.6.18-1ubuntu3.2) ...
Setting up samba (2:3.6.18-1ubuntu3.2) ...
update-alternatives: using /usr/bin/smbstatus.samba3 to provide /usr/bin/smbstat
us (smbstatus) in auto mode
smbd start/running, process 20795
nmbd start/running, process 20832
Setting up tdb-tools (1.2.11-2.1) ...
update-alternatives: using /usr/bin/tdbbackup.tdbtools to provide /usr/bin/tdbba
ckup (tdbbackup) in auto mode
Processing triggers for libc-bin ...
Processing triggers for ureadahead ...
Processing triggers for ufw ...
root@ubuntu:/home/asus# █
```

```
# apt-get install samba-doc libcusys2
```

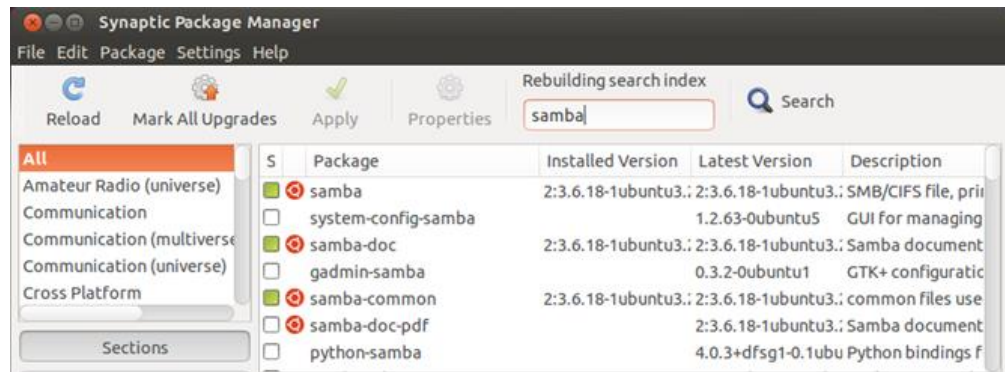
```
root@ubuntu:/home/asus# apt-get install samba-doc libcusys2
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package libcusys2
root@ubuntu:/home/asus# apt-get install samba-doc winbind smbclient
Reading package lists... Done
Building dependency tree
Reading state information... Done
smbclient is already the newest version.
Suggested packages:
  samba-doc-pdf libpam-winbind libnss-winbind
The following NEW packages will be installed:
  samba-doc winbind
0 upgraded, 2 newly installed, 0 to remove and 325 not upgraded.
Need to get 8,166 kB of archives.
After this operation, 27.0 MB of additional disk space will be used.
Do you want to continue [Y/n]? y
```

Lanjutan dari proses instalasi



```
root@ubuntu:/home/asus
Suggested packages:
  samba-doc-pdf libpam-winbind libnss-winbind
The following NEW packages will be installed:
  samba-doc winbind
0 upgraded, 2 newly installed, 0 to remove and 325 not upgraded.
Need to get 8,166 kB of archives.
After this operation, 27.0 MB of additional disk space will be used.
Do you want to continue [Y/n]? y
Get:1 http://us.archive.ubuntu.com/ubuntu/ saucy-updates/main samba-doc all 2:3.6.18-1ubuntu3.2 [5,723 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu/ saucy-updates/main winbind i386 2:3.6.18-1ubuntu3.2 [2,443 kB]
Fetched 8,166 kB in 22min 48s (5,968 B/s)
Selecting previously unselected package samba-doc.
(Reading database ... 168016 files and directories currently installed.)
Unpacking samba-doc (from .../samba-doc_2%3a3.6.18-1ubuntu3.2_all.deb) ...
Selecting previously unselected package winbind.
Unpacking winbind (from .../winbind_2%3a3.6.18-1ubuntu3.2_i386.deb) ...
Processing triggers for doc-base ...
Processing 3 added doc-base files...
Registering documents with scrollkeeper...
Processing triggers for man-db ...
Processing triggers for ureadahead ...
Setting up samba-doc (2:3.6.18-1ubuntu3.2) ...
Setting up winbind (2:3.6.18-1ubuntu3.2) ...
winbind start/running, process 24790
Processing triggers for ureadahead ...
root@ubuntu:/home/asus#
```

- Setelah diinstal semua maka tampilan pada synaptic untuk samba akan berwarna hijau



- Buka file `/etc/samba/smb.conf`

```
root@ubuntu:/home/asus# gedit /etc/samba/smb.conf

** (gedit:26466): WARNING **: Could not load Gedit repository: Typelib file for namespace 'GtkSource', version '3.0' not found

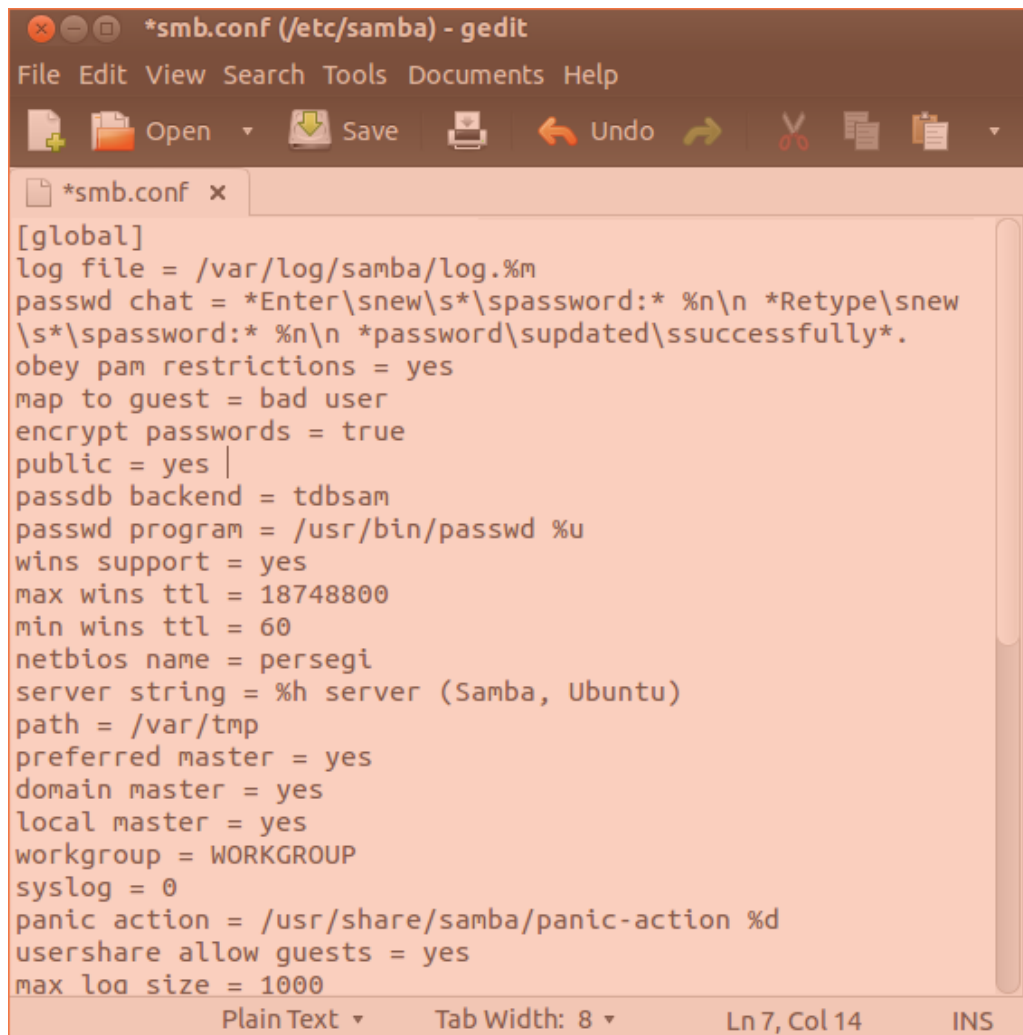
(gedit:26466): Gtk-WARNING **: Calling Inhibit failed: GDBus.Error:org.freedesktop.DBus.Error.ServiceUnknown: The name org.gnome.SessionManager was not provided by any .service files

(gedit:26466): Gtk-WARNING **: Calling Inhibit failed: GDBus.Error:org.freedesktop.DBus.Error.ServiceUnknown: The name org.gnome.SessionManager was not provided by any .service files
```

- Edit file `/etc/samba/smb.conf` dan rubah menjadi...

```
[global]
log file = /var/log/samba/log.%m
passwd chat = *Enter\snew\s*\spassword:* %n\n *Retype\snew\s*\spassword:*
*password\supdated\ssuccessfully*.
obey pam restrictions = yes
map to guest = bad user
encrypt passwords = true
public = yes
passdb backend = tdbsam
passwd program = /usr/bin/passwd %u
wins support = yes
max wins ttl = 18748800
min wins ttl = 60
netbios name = perseggi
server string = %h server (Samba, Ubuntu)
path = /var/tmp
preferred master = yes
domain master = yes
local master = yes
workgroup = WORKGROUP
syslog = 0
panic action = /usr/share/samba/panic-action %d usershare
allow guests = yes
max log size = 1000
pam password change = yes
name resolve order = wins bcast hosts lmhosts
socket options = TCP_NODELAY IPTOS_LOWDELAY SO_KEEPALIVE SO_RCVBUF=8192 SO_SNDBUF
level = 65
announce as = WfW
guest ok = Yes
usershare allow guests = Yes
```

```
name cache timeout = 0
nt status support = yes
nt pipe support = yes
winbind cache time = 60
idmap uid = 50-999999999
idmap gid = 50-999999999
idmap cache time = 120
lm announce = yes
lm interval = 10
enhanced browsing = Yes
browse list = yes
```



```
*smb.conf (/etc/samba) - gedit
File Edit View Search Tools Documents Help
Open Save Undo
*smb.conf x
[global]
log file = /var/log/samba/log.%m
passwd chat = *Enter\snew\s*\spassword:* %n\n *Retype\snew
\s*\spassword:* %n\n *password\supdated\ssuccessfully*.
obey pam restrictions = yes
map to guest = bad user
encrypt passwords = true
public = yes |
passdb backend = tdbsam
passwd program = /usr/bin/passwd %u
wins support = yes
max wins ttl = 18748800
min wins ttl = 60
netbios name = persegi
server string = %h server (Samba, Ubuntu)
path = /var/tmp
preferred master = yes
domain master = yes
local master = yes
workgroup = WORKGROUP
syslog = 0
panic action = /usr/share/samba/panic-action %d
usershare allowguests = yes
max log size = 1000
Plain Text Tab Width: 8 Ln 7, Col 14 INS
```

5. Buka file `/etc/hosts`

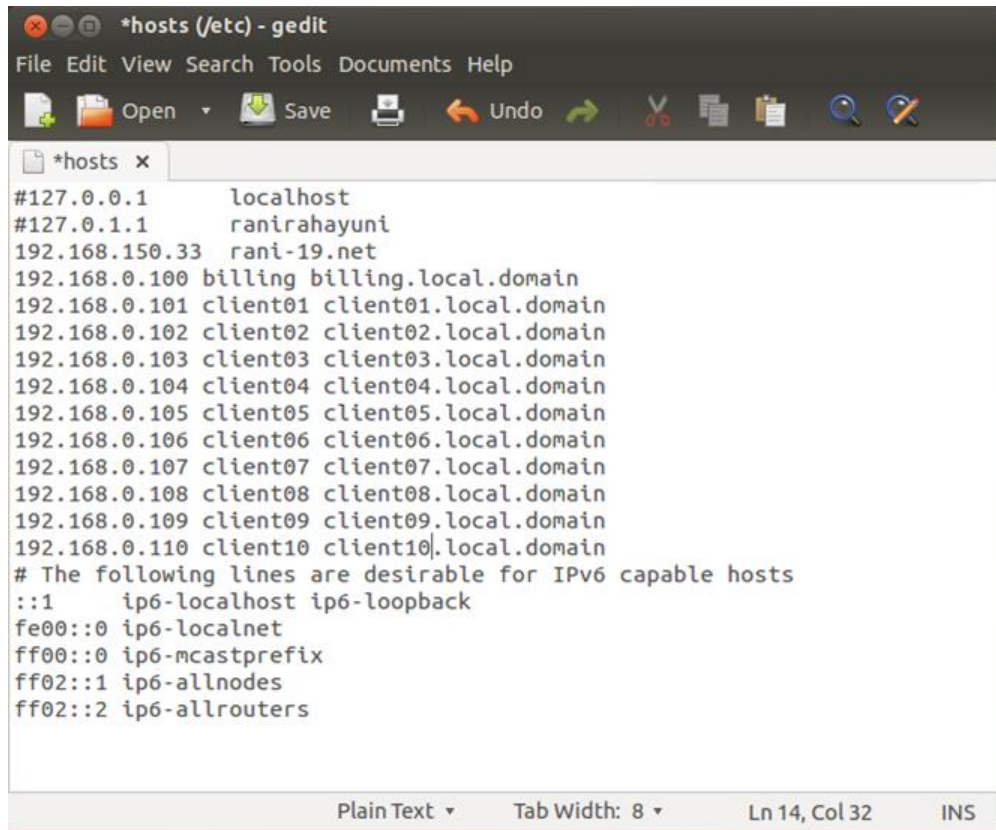
```
root@ubuntu:/home/asus# gedit /etc/hosts
```

6. Edit file `/etc/hosts` seperti berikut:

```
127.0.0.1 localhost
192.168.0.1 router router.local.domain www.local.domain proxy.local.domain
192.168.0.100 billing billing.local.domain
192.168.0.101 client01 client01.local.domain
192.168.0.102 client02 client02.local.domain
192.168.0.103 client03 client03.local.domain
192.168.0.104 client04 client04.local.domain
192.168.0.105 client05 client05.local.domain
```



```
192.168.0.106 client06 client06.local.domain
192.168.0.107 client07 client07.local.domain
192.168.0.108 client08 client08.local.domain
192.168.0.109 client09 client09.local.domain
192.168.0.110 client10 client10.local.domain
```



```
*hosts (/etc) - gedit
File Edit View Search Tools Documents Help
Open Save Print Undo Redo
*hosts x
#127.0.0.1 localhost
#127.0.1.1 ranirahayuni
192.168.150.33 rani-19.net
192.168.0.100 billing billing.local.domain
192.168.0.101 client01 client01.local.domain
192.168.0.102 client02 client02.local.domain
192.168.0.103 client03 client03.local.domain
192.168.0.104 client04 client04.local.domain
192.168.0.105 client05 client05.local.domain
192.168.0.106 client06 client06.local.domain
192.168.0.107 client07 client07.local.domain
192.168.0.108 client08 client08.local.domain
192.168.0.109 client09 client09.local.domain
192.168.0.110 client10 client10.local.domain
# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
Plain Text Tab Width: 8 Ln 14, Col 32 INS
```

7. Buat file `/etc/samba/lmhosts` dan masukkan nama host computer client dan ip seperti diatas untuk pencarian dengan metode lmhosts file, contoh sebagai berikut:

```
192.168.0.1 router
192.168.0.100 billing
192.168.0.101 client01
192.168.0.102 client02
192.168.0.103 client03
192.168.0.104 client04
192.168.0.105 client05
192.168.0.106 client06
192.168.0.107 client07
192.168.0.108 client08
192.168.0.109 client09
192.168.0.110 client10
```



```
*lmhosts (/etc/samba) - gedit
File Edit View Search Tools Documents Help
Open Save Print Undo Redo
*lmhosts x
192.168.0.1 router
192.168.0.100 billing
192.168.0.101 client01
192.168.0.102 client02
192.168.0.103 client03
192.168.0.104 client04
192.168.0.105 client05
192.168.0.106 client06
192.168.0.107 client07
192.168.0.108 client08
192.168.0.109 client09
192.168.0.110 client10
Plain Text Tab Width: 8 Ln 12, Col 23 INS
```

8. Buka dan edit file `/etc/nsswitch.conf` cari baris...

```
hosts: files mdns4_minimal [NOTFOUND=return] dns mdns4
```

ubah menjadi

```
hosts: files dns wins winbind mdns4_minimal [NOTFOUND=return] mdns4
```

```
*nsswitch.conf (/etc) - gedit
File Edit View Search Tools Documents Help
Open Save Print Undo Redo Cut
*nsswitch.conf x
# 'info libc "Name Service Switch"' for information
about this file.

passwd:      compat
group:       compat
shadow:      compat

hosts:       files dns wins winbind mdns4_minimal
[NOTFOUND=return] mdns4
networks:    files

protocols:   db files
services:    db files
ethers:      db files
rpc:         db files
Plain Text Tab Width: 8 Ln 11, Col 76 INS
```

V. Pertanyaan

1. Mengapa menggunakan samba sebagai media untuk berbagi data antar computer dengan beda system operasi?

Jawab:

Karena pada awal perkembangannya komunikasi data antar Sistem Operasi tidak semudah saat ini. Hanya bisa sesama OS, misalkan antar Linux dengan Linux. Maka untuk mendapat solusinya, samba hadir sebagai media berbagi data antar Sistem Operasi.

2. Terangkan selain menggunakan samba dengan cara apa dapat dilakukan berbagi data antar terminal komputer yang sama atau berbeda system operasinya?

Jawab:

Selain menggunakan samba untuk berbagi data antar terminal komputer yang sama atau berbeda system operasinya yaitu dapat menggunakan server HTTP dan server FTP.

3. Adakah sistem operasi windows yang cukup sulit untuk dapat berbagi data dengan system linux dalam berbagi data?

Jawab:

Tidak ada kesulitan jika kedua sistem operasi dapat saling terkoneksi melalui samba server.

VI. Kesimpulan

- Samba adalah salah satu program pada linux yang digunakan untuk dapat berinteraksi dengan windows.
- Untuk melihat folder Windows di linux menggunakan browser dengan mengetikkan smb://ip-address-windows pada address bar.
- Di dalam Linux samba terdiri dari 2 daemon kunci smb dan nmbd, keduanya ada di bawah /etc/rc.d/init.d. Keduanya mampu melakukan 4 tugas dasar dari NetBEUI, yaitu: File & Print Sharing, Authentication dan Authorization, Name Resolution dan Browsing.
- Windows dapat berkomunikasi dengan computer linux dengan menyesuaikan kondisinya dengan linux.