LINUX ADMINISTRATION

UNIT 3
CHAPTER-1

CHAPTER 1 : CONNECTING TO MICROSOFT NETWORKS

- Installing Samba
- Configuring the Samba Server
- Creating Samba Users
- Starting the Samba Server
- Connecting to a Samba Client
- Connecting from a Windows PC to the Samba Server

- **Installing Samba**

- **Quering samba installed or not**
  - **rpm -q samba**
  - **If Samba is not installed, the command returns —not installed**
  - **If Samba is installed, the RPM query returns the version number**

- **Samba RPM file, install it as follows**
  - **rpm -i samba(name of file)**

- **Configuring the Samba Server**
  - Samba includes a utility called SWAT, the Samba Web Administration Tool.
  - The main Samba configuration file is **/etc/smb.conf**
  -
- **[global]**
  - **workgroup = ONE**
  - **netbios name = TERRY**
  - **server string = Samba Server**
  - **security = SHARE**
  - **log file = /var/log/samba/log**
  - **max log size = 50**
  - **socket options = TCP_NODELAY SO_RCVBUF=8192**
  - **SO_SNDBUF=8192**
  - **dns proxy = No**
  - **wins support = Yes**
  - **hosts allow = 192.168.1.**
  - **hosts deny = all**
- **[homes]**
  - **comment = Home Directories**
  - **read only = No**
- **[printers]**
  - **comment = All Printers**
  - **path = /var/spool/samba**
  - **guest ok = Yes**
  - **print ok = Yes**
  - **browseable = Yes**

- **[global]**
  - The first section of the smb.conf file is the [global] section.
- **option = value**
  - complete listing of options refer to the **smb.conf man page.**
- **workgroup = ONE**
  - is the name of the workgroup shown in the identification tab of the network properties box on the Windows computer.
- **netbios name = TERRY**
  - is the name by which the Samba server is known to the Windows computer.
- **server string = Samba Server**
  - is the name of the Samba server.
- **security = SHARE**
  - is the level of security applied to server
  - Using **share** makes it easier to create anonymous shares that do not require authentication

- **log file = /var/log/samba/log**
  - is the location of the log file.
- **max log size = 50**
  - is the maximum size in kilobytes that the file can grow to.
- **socket options = TCP_NODELAY SO_RCVBUF=8192 SO_SNDBUF=8192**
  - enables the server to be tuned for better performance. TCP_NODELAY is a default value, the BUF values set send and receive buffers.
- **dns proxy = No**
  - indicates that the netbios name will not be treated like a DNS name and there is no DNS lookup.
- **wins support = Yes**
  - is used to tell the Samba server to act as a WINS server.
- **hosts allow = 192.168.1.**
  - means that requests from this network will be accepted.

- **hosts deny = all**
  - means that all hosts‘ requests will be denied.

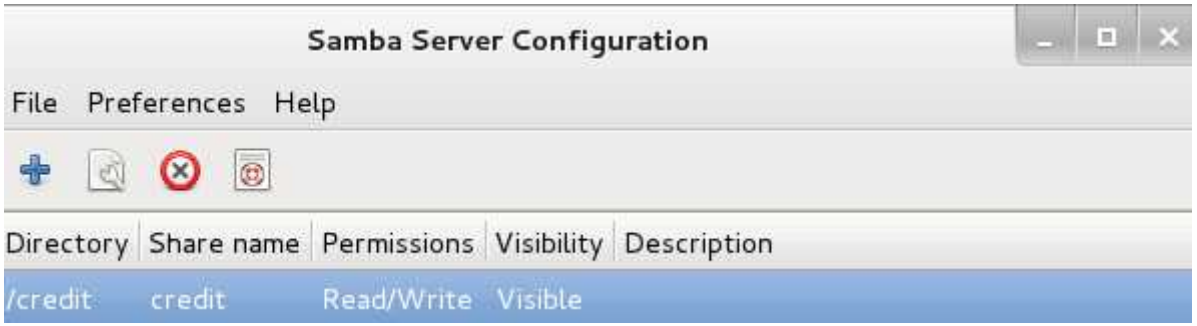
[homes]

- The next section of the smb.conf file, [homes], is used to enable the server to give users quick access to their home directories.
- **comment = Home Directories**
  - is a comment line
- **read only = No**
  - specifies that users can write to their directories.

[printers]

- This section sets the options for printing.
- **path = /var/spool/samba**
  - **is the location of the printer spool directory.**
- **guest ok = Yes**
  - **enables guest access to the printer.**
- **print ok = Yes**
  - **enables clients to send print jobs to the specified directory.This option must be set or printing does not work.**
- **browseable = Yes**
  - **means that the printer appears in the browse list.**

USING SYSTEM-CONFIG-SAMBA UTILITY



USING SWAT

- Before you can use SWAT, you need to change two files to enable it.
  - 1.The first file is /etc/services.
    - **Swat 901/tcp**
  - 2. Next you need to add a line to **/etc/inetd.conf.** The inetd daemon runs at system startup and listens for connections at specific ports.
    - **Swat stream tcp nowait.400 root /usr/sbin/swat swat**

START THE SWAT

- 1.need to restart the inetd daemon so it reads the changes you made to **inetd.conf.**
  - **killall -HUP inetd**
- 2.open web browser and in the location box, enter the address for localhost and the port number for SWAT as.
  - **http://localhost:901**
- 3.After starting Samba you can run smbclient on your localhost to get some configuration information
  - **smbclient -L localhost**

ADDING USERS TO SAMBA

- At this point you should be able to see the samba server from any windows system in the same workgroup but you won't be able to access the share; not until you add the user(s).

- Samba authenticates its users through its local database. Once you have saved the changes to **smb.conf ,** you need to add the users.

- **Add your existing users to samba or create new users and then add them to samba.**

- **[root@server2 root]# smbpasswd –a**
  educlash New SMB password: ********
  Retype new SMB password:********

Samba passwords are stored in /etc/samba/smbpasswd

STARTING THE SAMBA SERVER

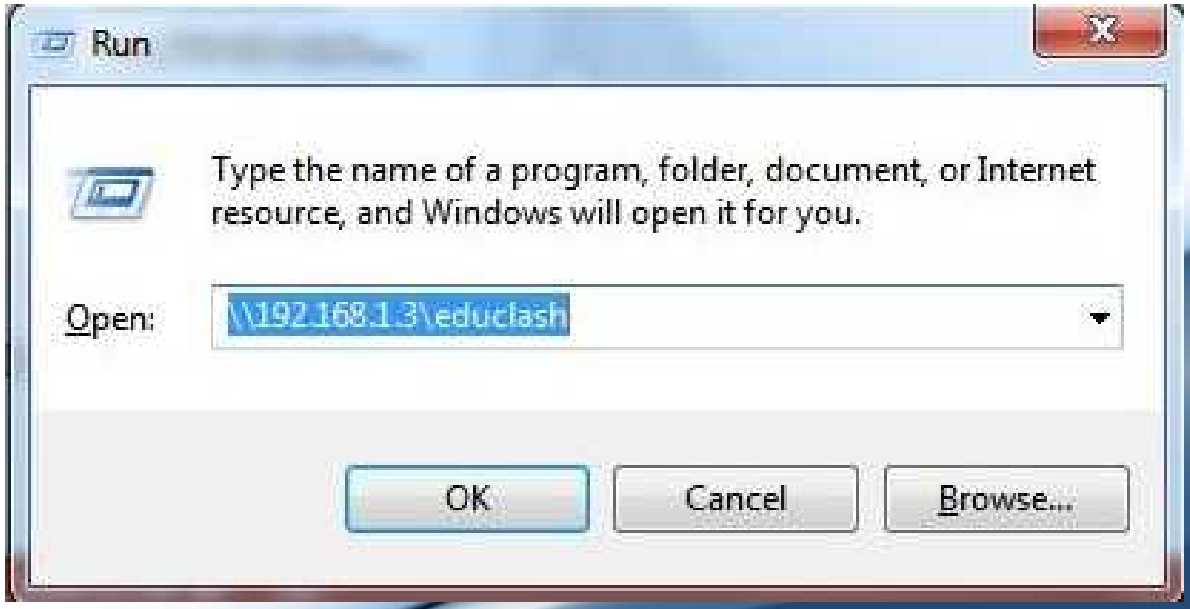
- **Start /etc/init.d/samba start**
- **Stop /etc/init.d/samba stop**
- **Restart /etc/init.d/samba restart**

CONNECTING TO A SAMBA CLIENT

- **smbclient**
  - Using smbclient is very similar to using a command- line FTP client. Here are a few useful commands:
    - **smbclient -L //hostname**
      - hostname is the NetBIOS name of the machine you wish to connect to
      - After being prompted for a password (enter no password for anonymous login) this command will give you a list of available shares on the machine, plus some other information.
  - To connect to a share, you must specify the share name, in the format **//hostname/sharename**
    - **smbclient //educlash.com/educlash**
    - After entering siddhu's password, you are given an **smb: \>** **prompt** where you may enter commands much like an FTP client

CONNECTING FROM A WINDOWS PC TO THE SAMBA SERVER

- **\\192.168.1.3\educlash**
  - TYPE IT IN RUN



TESTING THE SAMBA SERVER

- use the **smbclient utility** to access the directories on the Windows computer as follows:

  - **Smbclient //systemname/directory name**

WHY USE SAMBA INSTEAD OF NFS?

- **NFS** is not used to share Windows files.
- **samba** is the Windows native protocol for sharing files and printers
- **Samba** sharing operate with a minimum of difficulty

THANK YOU