

Linux File Server

(The procedure explained in this document holds for file server setup in Red Hat Linux based server machines. This document is Designed By Sisavanh Singvongsa for the National University of Laos.)

A file server is used to store user files in a secure and easy manner. The files are stored in a central location on the network and can be accessed from remote locations whenever needed.

The SMB(Server Message Block) is a standard used by many operation systems like Linux and Windows operating systems to share file and printer services. We make use of the SMB based SAMBA server package that works with Red Hat Linux.

SAMBA Installation

Samba is useful if you have a network of both Windows and Linux machines. Samba allows files and printers to be shared by all the systems in your network. If you do not have Samba installed already on your Linux machine, follow these steps, otherwise move on to next section.

Insert Redhat CD1:

```
[root@one root]# mount /mnt/cdrom/
[root@one root]# cd /mnt/cdrom/RedHat/RPMS/
[root@one RPMS]# rpm -Uvh perl-5.6.1-34.99.6.i386.rpm
Preparing... ##### [100%]
 1:perl ##### [100%]
[root@one RPMS]# rpm -Uvh libjpeg-6b-19.i386.rpm
Preparing... ##### [100%]
 1:libjpeg ##### [100%]
[root@one RPMS]# rpm -Uvh libpng-1.0.12-2.i386.rpm
Preparing... ##### [100%]
 1:libpng ##### [100%]
[root@one RPMS]# rpm -Uvh libtiff-3.5.7-2.i386.rpm
Preparing... ##### [100%]
 1:libtiff ##### [100%]
[root@one RPMS]# rpm -Uvh cups-libs-1.1.14-15.i386.rpm
Preparing... ##### [100%]
 1:cups-libs ##### [100%]
[root@one RPMS]# rpm -Uvh xinetd-2.3.4-0.8.i386.rpm
Preparing... ##### [100%]
 1:xinetd ##### [100%]
[root@one RPMS]# cd; eject
[root@one RPMS]#
```

Insert Redhat CD2:

```
[root@one root]# mount /mnt/cdrom/
[root@one root]# cd /mnt/cdrom/RedHat/RPMS/
[root@one RPMS]# rpm -Uvh samba-common-2.2.3a-6.i386.rpm
```

```

Preparing...                               ##### [100%]
 1:samba-common                             ##### [100%]
[root@one RPMS]# rpm -Uvh samba-2.2.3a-6.i386.rpm
Preparing...                               ##### [100%]
 1:samba                                     ##### [100%]
[root@one RPMS]# cd; eject
[root@one RPMS]#

```

Insert Redhat CD3

```

[root@one root]# mount /mnt/cdrom/
[root@one root]# cd /mnt/cdrom/RedHat/RPMS/
[root@one RPMS]# rpm -Uvh samba-swat-2.2.3a-6.i386.rpm
Preparing...                               ##### [100%]
 1:samba-swat                               ##### [100%]
[root@one RPMS]# cd; eject

```

Samba Configuration

Open the smb configuration file for editing.

```
[root@one root]# vi /etc/samba/smb.conf
```

Make changes to the file as desired:

```

# Global parameters
[global]
    workgroup = ABCD
    netbios name = SHARE
    server string = Samba server in share level
    security = SHARE
    os level = 32

[share]
    comment = share without password
    path = /home/samba
    read only = No
    directory mask = 0777
    guest ok = Yes
    printing = lprng

[homes]
    comment = Home Directories
    valid users = %S
    read only = No
    create mask = 0664
    directory mask = 0775
    browseable = No

[printers]

```

```
comment = All Printers
path = /var/spool/samba
printable = Yes
browseable = No
```

Then save and run samba as following:

```
[root@one root]# mkdir /home/samba
[root@one root]# chmod -R 777 /home/samba
[root@one root]# chown nobody.nobody /home/samba
[root@one root]# /etc/init.d/smb start
Starting SMB services: [ OK ]
Starting NMB services: [ OK ]
[root@one root]#
```

SWAT Configuration

SWAT is a graphical tool for configuring Samba Deamon. Use command line below to edit swat file:

```
[root@one root]# vi /etc/xinetd.d/swat
```

Details of swat files are shown below:

```
# default: off
# description: SWAT is the Samba Web Admin Tool. Use swat \
#             to configure your Samba server. To use SWAT, \
#             connect to port 901 with your favorite web browser.
Service swat
{
  port = 901
  socket_type = stream
  wait = no
  only_from = 127.0.0.1 192.168.1.9
  user = root
  server = /usr/sbin/swat
  log_on_failure += USERID
  disable = no
}
```

meaning: `only_from = 127.0.0.1` Default the SWAT can only be accessed from localhost (127.0.0.1). To add access for more IP addresses, such as 192.168.1.9. Edit as shown above.

`disable = no`

This means that the SWAT is active. To disable the service type: `disable = yes`.

After saving the configuration, activate the new SWAT settings by using the command line as show below.

```
[root@one root]# /etc/init.d/xinetd start
Starting xinetd:
[root@one root]#
```

Now the installation and for samba and samba-swat are completed.

Congratulations! Now that you have everything working :), test you setup !