FTP, File and Print Server

FTP Server

1. To enable anonymous user (in RHEL, it will be enabled by default)

> Nope: The root directory of anonymous user /var/ftp

```
vi /etc/vsftpd/vsftpd.conf

        anonymous_enable=YES

[Save with Esc :wq]

#restart service with following command

service vsftpd start
```

2. Allow real user's ftp login (for deny change local_enable=NO; by default it will be YES)

```
vi /etc/vsftpd/vsftpd.conf

        local_enable=YES
```

3. Denying selected real users' ftp login

```
vi /etc/vsftpd.ftpusers

        user1

        user2
```

4. Allowing selected users from login to ftp server. (by default userlist_deny will be NO)

```
vi /etc/vsftpd/vsftpd.conf

        userlist_enable=YES

        userlist_deny=NO
```

5. To set ftp banner (Banner will be displayed on logging in to ftp server)

```
        ftpd_banner=welcome to ftp.cba.com
```

6. Allowing ftp users to upload (practically we don't allow anonymous user to upload file)

```
        anon_upload_enable=YES

        chown_uploads=YES

        chown_username=cba

        anon_umask=077
```

Lab on Network File service (NFS)

Packages needed:

```
nfs-utils
portmap
autofs
```

Targeted Audience: Students of Network and System Administration CSIT (TU), System Administration (Elective) BE Computer/BIT (Purbanchal University), MCS 22: Operating System Concepts and Network Management IGNOU, MCS 52: Network Administration and Programming, IGNOU

Main configuration file:

/etc/exports

format:

Abs_path_of_dir   host(option)

Example:

```
vi /etc/exports

        #to allow sharing /varftp/pub to 192.168.0.0/24 subnet (read/write)

        /var/ftp/pub 192.168.0.0/255.255.255.0(rw,sync)

        #to allow sharing /backup to any network (read only)

        /backup        *(ro,sync)

        #to allow sharing /backup to any host which name is server (read/write)

        /cba            server.*(rw,sync)

        #to allow sharing /shiba to any host which name is server.cba.com domain

        #where X can be any character. (read/write)

        /shiba  server?.cba.com(rw,sync)
```

In client Machine

```
showmount -e <nfs_server>

mount serverip:/var/ftp/pub /localpub

#where serverip is the ipaddress of server and localpub is a directory in local

#machine (client)
```

Permanent mounting on boot automatically

```
vi /etc/fstab

        serverip:/var/ftp/pub /localpub nfs deafules 0 0

        #where serverip is the ipaddress of server and localpub is a directory in

#local machine (client)
```

Lab on Samba

Daemon: smbd and nmbd
script: /etc/init.d/smb
Configuration files: /etc/samba/*
Tools: system-config-samba, testparm
Main configuration file: /etc/samba/smb.conf

Sections of smb.conf

smb.conf: is styled after the .ini file format and is split into different [ ] sections

[global] : section for server generic or global settings
[homes] : used to grant some or all users to their home directories
[printers]:defines printer resources and services
Example: to share a directory named myshared_data to students group, add the following line at the end of /etc/samba/smb.conf

```
        [myshared_data]
        comment=share directory
        path = /home/cba/myshared_data
        public = no
        write list = @students
        printable = no
        browseable = yes
```

2. Example to share a printer named testprinter to user cba and shiba, add the following line at the end of smb.conf

```
[sharedprinter]
        comment=share printer
        path = /var/spool/ testprinter
        public = no
        valid users = cba shiba
        printable = yes
```

Note: there should be a directory named shared ptr in /var/spool, if don't exist create it.

Adding user to samba (the users cba and shiba should be local users of Linux)

```
smbpasswd -a cba
smbpasswd -a shiba
#To restart the samba service
service smb restart
```

Samba clients
1. To view the shared resources in particular host
```
smbclient -L hostname
```
2. To copy a file in smb server to current directory
```
smbclient //machine/service -U cba
        >cd directory
        >get filename
```
3. Also, mount command can be used
```
mount //machine/service /smbclientdirecotry
```

Printer Configuration with CUPS
Configuring and using printer
Configuration files:
/etc/cups/cupsd.conf
/etc/cups/printers.conf
Command to configure printer
```
system-configure-printer
```

Web interface for configuration
http://localhost:631
To authenticate user must be the member of system Group (sys by default) listed in /etc/cupscupsd.conf

Further Study:

https://www.centos.org/docs/5/html/Deployment_Guide-en-US/s1-nfs-server-export.html

https://www.centos.org/docs/5/html/Deployment_Guide-en-US/s1-samba-configuring.html

https://www.centos.org/docs/5/html/Deployment_Guide-en-US/s1-ftp-vsftpd-conf.html

https://www.centos.org/docs/5/html/Deployment_Guide-en-US/ch-printing.html