

## Assignments:08

**Module:- COSA(FTP) Name:- Prithviraj Nikam**

**Configure FTP server and upload a file(file name:-client\_yourname in FTP server and download(file name:-server\_yourname) form the ftp server**

**FTP(File Transfer Protocol):- It is a standard network protocol used for the transfer the files between client and server on a computer .FTP is built on a client – server model architecture using separate control and data connections between client and the server.**

**I need two machines to give the demo:**

**FTP server --- > IP 10.182.3.230**

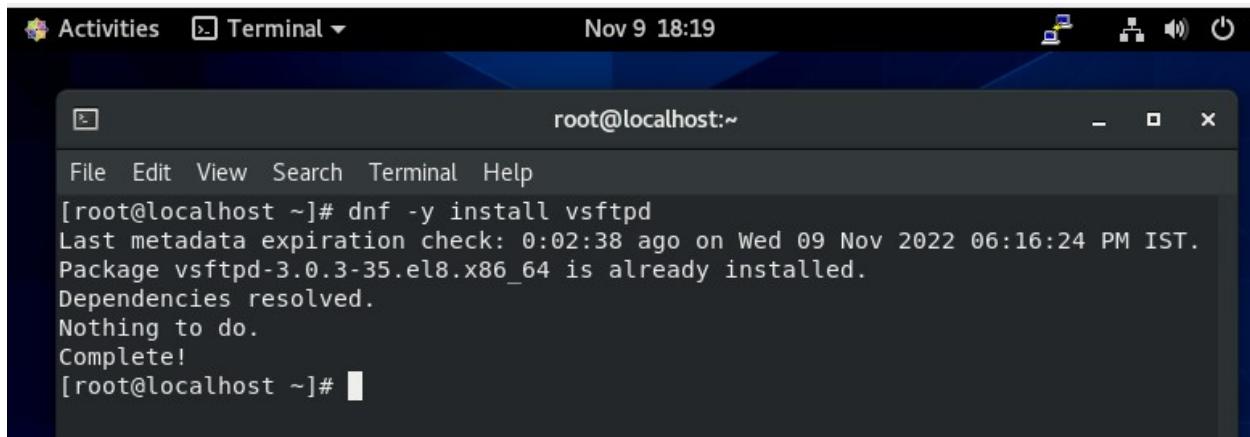
**FTP Client --- >**

**Install and configure VSFTP**

**VSFTP is tool or program which known as Very Secure FTP :**

**Step-1:-Step 1:- Install vsftpd**

```
# sudo dnf -y install vsftpd
```



```
Activities Terminal Nov 9 18:19
root@localhost:~ File Edit View Search Terminal Help
[root@localhost ~]# dnf -y install vsftpd
Last metadata expiration check: 0:02:38 ago on Wed 09 Nov 2022 06:16:24 PM IST.
Package vsftpd-3.0.3-35.el8.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@localhost ~]#
```

**Step 2 : Configure the file “vsftpd.conf”**

```
#sudo vi /etc/vsftpd/vsftpd.conf
```

**Set the line number in vi editor**

```
:set number
```

```
Line 12
```

**anonymous\_enable=NO**

**In Line 14 -17 Add below statement**

**local\_enable=YES  
userlist\_enable=YES  
userlist\_deny=NO**

```
File Edit View Search Terminal Help
 8 # Please read the vsftpd.conf.5 manual page to get a full idea of vsftpd
    's
 9 # capabilities.
10 #
11 # Allow anonymous FTP? (Beware - allowed by default if you comment this
   out).
12 anonymous_enable=NO
13 #
14 # Uncomment this to allow local users to log in.
15 local_enable=YES
16 userlist_enable=YES
17 userlist_enable=YES
18 # Uncomment this to enable any form of FTP write command.
19 write_enable=YES
20 #
21 # Default umask for local users is 077. You may wish to change this to 0
   22,
22 # if your users expect that (022 is used by most other ftpd's)
23 local_umask=022
24 #
25 # Uncomment this to allow the anonymous FTP user to upload files. This o
   nly
qqq
-- INSERT --
```

**Line no. 82, 83 (if you are and above statement)**

**Uncomment**

**ascii\_upload\_enable=YES  
ascii\_download\_enable=YES**

```
82 # ASCII mangling is a horrible feature of the protocol.  
83 ascii_upload_enable=YES  
84 ascii_download_enable=YES  
85 #
```

If you want add some login banner

**ftpd\_banner=Welcome to CDAC FTP server**

```
86 # You may fully customise the login banner string:  
87 ftpd_banner=Welcome to CDAC FTP server  
88 # You may specify a file of disallowed anonymous e-mail addresses. Apparently  
89 # useful for combating certain DoS attacks.
```

Uncomment the line 100, 101

**chroot\_local\_user=YES**

**chroot\_local\_enable=YES**

```
99 # chroot,  
100 chroot_local_user=YES  
101 chroot_list_enable=YES  
102 # (default follows)
```

Uncomment the line 103

**chroot\_list\_file=/etc/vsftpd/chroot\_list**

```
102 # (default follows)  
103 chroot_list_file=/etc/vsftpd/chroot_list  
104 #
```

Uncomment line 109 (by default)

**ls\_recurse\_enable=YES**

```
g it.  
109 ls_recurse_enable=YES  
110 #
```

If you change in the line no 114 NO to YES it means this server listen only on IPv4.

Listen both IPv4 and IPv6 , set NO

**listen=NO**

```
111 # When listen directive is enabled, vsftpd runs in standalone mode and
112 # listens on IPv4 sockets. This directive cannot be used in conjunction
113 # with the listen_ipv6 directive.
114 listen=NO
```

**Line 123: If you set NO it means your server is not able to listen on IPv6**

**For both set it YES**

**listen\_ipv6=YES**

```
124 " /etc/
122 # Make sure, that one of the listen options is commented !!
123 listen_ipv6=YES
124
125
```

**Add some few new lines in the end**

**# to specify root directory , if not specify, user's home directory become FTP  
home directory**

**local\_root=public\_html**

**# For use the local time**

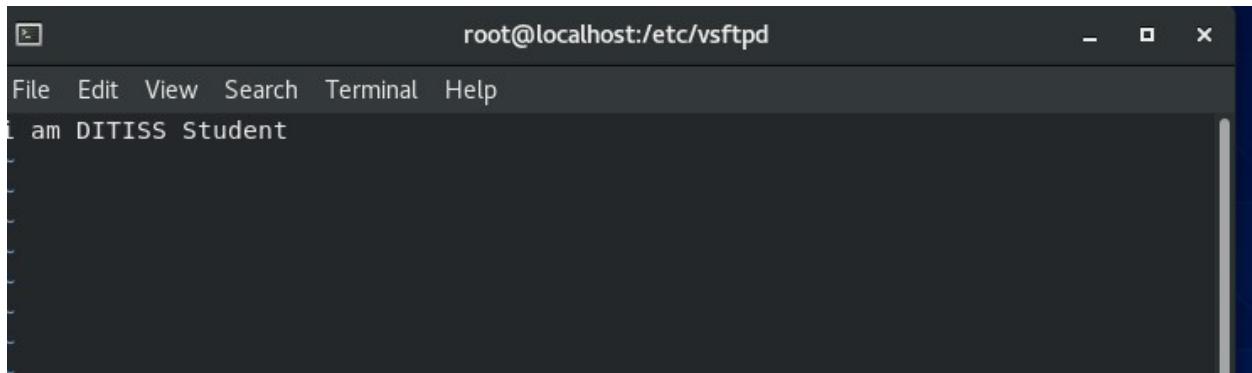
**use\_localtime=YES**

```
125 pam_service_name=vsftpd
126 userlist_enable=YES
127 local_root=public html
128 use_localtime=YES
-- INSERT --
```

**Step 3:- Create /etc/vsftpd/chroot\_list file for you ftp server which contain  
your user**

**sudo vi chroot\_list**

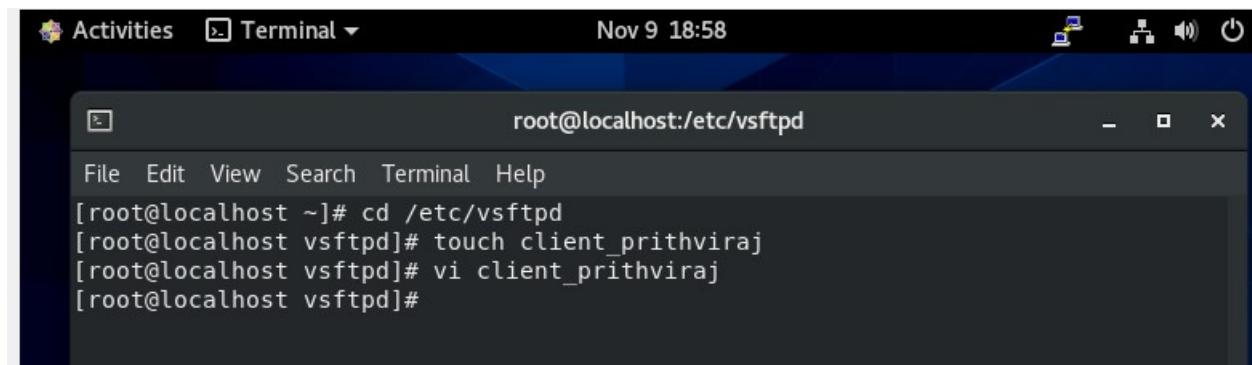
**Cdac**



```
I am DITISS Student
```

**Step 4: After the configuration of “vsftpd.conf” you must restart the vsftpd services**

```
sudo systemctl restart vsftpd
```



```
[root@localhost ~]# cd /etc/vsftpd
[root@localhost vsftpd]# touch client_prithviraj
[root@localhost vsftpd]# vi client_prithviraj
[root@localhost vsftpd]#
```

**Step 5:- To check the status is it active or not**

```
sudo systemctl status vsftpd
```

```
[root@localhost vsftpd]# systemctl restart vsftpd
[root@localhost vsftpd]# systemctl status vsftpd
● vsftpd.service - Vsftpd ftp daemon
   Loaded: loaded (/usr/lib/systemd/system/vsftpd.service; disabled; vendor pre>
   Active: active (running) since Wed 2022-11-09 18:59:04 IST; 11s ago
     Process: 4440 ExecStart=/usr/sbin/vsftpd /etc/vsftpd/vsftpd.conf (code=exited)
   Main PID: 4441 (vsftpd)
      Tasks: 1 (limit: 12262)
     Memory: 768.0K
        CPU: 0.000 CPU(s) since start
       CGroup: /system.slice/vsftpd.service
               └─4441 /usr/sbin/vsftpd /etc/vsftpd/vsftpd.conf

Nov 09 18:59:04 localhost.localdomain systemd[1]: Starting Vsftpd ftp daemon...
Nov 09 18:59:04 localhost.localdomain systemd[1]: Started Vsftpd ftp daemon.
Lines 1-12/12 (END)
```

**Allow FTP service ports in firewall if it is running**

**\$ sudo firewall-cmd --add-service=ftp-permanent**

**In my case firewall service is in inactive or dead mode**

**\$ sudo systemctl stop firewalld**

**\$sudo systemctl disable firewalld**

**\$sudo iptables -F**

```
[root@localhost vsftpd]# systemctl start firewalld
[root@localhost vsftpd]# iptables -F
[root@localhost vsftpd]# firewall-cmd --add-service=ftp --permanent
success
[root@localhost vsftpd]#
```

**Client :-**

**Step-1:-**

**Install lftp service in the client part**

**sudo yum -y install lftp**

**To connect the FTP server from the client**

**lftp -u cdac 192.168.3.147**

```
root@localhost:~  
File Edit View Search Terminal Help  
[root@localhost ~]# dnf install vsftpd  
Last metadata expiration check: 7:56:59 ago on Wed 09 Nov 2022 12:51:49 AM EST.  
Dependencies resolved.  
=====  
 Package      Architecture Version       Repository      Size  
=====  
 Installing:  
 vsftpd        x86_64      3.0.3-35.el8    appstream     181 k  
  
Transaction Summary  
=====  
Install 1 Package  
  
Total download size: 181 k  
Installed size: 347 k  
Is this ok [y/N]: y  
Downloading Packages:  
vsftpd-3.0.3-35.el8.x86_64.rpm          30 kB/s | 181 kB   00:06  
-----  
Total                                         15 kB/s | 181 kB   00:12  
Running transaction check  
Transaction check succeeded.  
Running transaction test
```