

Tribhuvan University
Institute of Engineering
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INTERNET AND INTRANET

Lab 1

VSFTP Server Configuration

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Title

VSFTP Server Configuration

Background Theory

File transfer protocol (FTP) is a standard network protocol used for the transfer of files from one host to another over a TCP-based network, such as the Internet. FTP is a commonly used protocol for transferring files between computers, and it is also used to transfer files from a server to a client or from a client to a server. One of the most popular and secure FTP server software is VSFTP (Very Secure File Transfer Protocol).

VSFTP(Very Secure FTP) is a free and open-source FTP server software that is widely used on Linux and Unix-based operating systems, as well as Windows. It offers a variety of features including support for virtual users, SSL/TLS encryption, and file permissions. VSFTP is considered to be one of the most secure FTP servers available, and it is often used for securely transferring files over a network. In this report, we will discuss the basic steps to install and configure a VSFTP server on Linux and Windows operating systems.

Activity

1 VSFTPD Installation

1. Updated system packages.

```
sudo apt update
```

2. Installed VSFTPD package.

```
sudo apt install vsftpd ftp ufw -y
```

3. Enabled the VSFTPD server.

```
sudo systemctl enable vsftpd
```

4. Launched VSFTPD.

```
sudo systemctl start vsftpd
```

5. Checked the status of VSFTPD.

```
sudo systemctl status vsftpd
```

```

ubuntu@Katuwal:~$ sudo systemctl enable vsftpd
Synchronizing state of vsftpd.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable vsftpd
ubuntu@Katuwal:~$ sudo systemctl start vsftpd
ubuntu@Katuwal:~$ sudo systemctl status vsftpd
● vsftpd.service - vsftpd FTP server
   Loaded: loaded (/lib/systemd/system/vsftpd.service; enabled; preset: enabled)
   Active: active (running) since Sun 2023-01-22 21:11:01 +0545; 1min 47s ago
     Main PID: 3179 (vsftpd)
       Tasks: 1 (limit: 1037)
      Memory: 856.0K
         CPU: 4ms
    CGroup: /system.slice/vsftpd.service
            └─3179 /usr/sbin/vsftpd /etc/vsftpd.conf

Jan 22 21:11:01 Katuwal systemd[1]: Starting vsftpd FTP server...
Jan 22 21:11:01 Katuwal systemd[1]: Started vsftpd FTP server.

```

Figure 1: VSFTPD installation

2 Configuration file for VSFTPD

1. VSFTPD file was configurde as follows.

```

log_ftp_protocol=YES
anonymous_enable=YES # allow anonymous user to login
seccomp_sandbox=NO # this line disables security sandbox
use_sendfile=YES # enable send/receive file functionality
local_enable=YES # allow local users to login
write_enable=YES # allow FTP write command
anon_upload_enable=YES # allow anonymous users to upload
dirmessage_enable=YES
xferlog_enable=YES
connect_from_port_20=YES
listen=YES
pam_service_name=vsftpd

```

2. VSFTPD was restarted.

```

sudo systemctl restart vsftpd

```

```

ubuntu@Katuwal:~$ sudo systemctl restart vsftpd

```

Figure 2: VSFTPD restart

3 FTP Connection

1. Connect using ftp IP
2. Use recv to receive and send to send.

```
ftp localhost  
ls  
recv test.txt
```

Conclusion

In this report, we have discussed the basic steps to install and configure a VSFTP server on Linux operating systems. The process of configuring a VSFTP server involves installing the software, configuring the settings, creating virtual users, and testing the server to ensure it is working properly.