FTP Configuration

Here is the process used to install and configure my FTP server on Debian 10. The original tutorial I followed is found here: <https://www.osradar.com/how-to-set-up-an-ftp-server-on-debian-10-buster/>.

1. Ensuring the system has an updated package cache and any necessary security patches:

Sudo apt update && sudo apt apt upgrade

2. Installing VSFTPD and checking that the service is running

Sudo apt install vsftpd

Sudo systemctl status vsftpd

3. Backing up the default configuration file

The configuration file is found at ***/etc/vsftpd.conf***. We need to make a backup of this in case something goes wrong and we need to start again.

Sudo cp /etc/vsftpd.conf /etc/vsftpd.conf.bak

4. Configuring the FTP server

First, we’ll ensure the server is set to “listen” then we’ll disable IPv6 as we don’t use it:

listen=YES

listen\_ipV6=NO

Then we’ll enable uploading to the server and ensure that the server can be connected to from port 20:

write\_enable=YES

connect\_from\_port\_20=YES

Next, we need to setup security restrictions. We need to be able to prevent users from being able to upload and delete other user’s files, unless they are using a pre-authorised account. To do this, we’ll enable chroot so that users are restricted to their home directory when logging in (unless they are an admin). We will specify which accounts are exempt from this restriction in ***/etc/vsftpd.chroot\_list***

chroot\_local\_user=YES

chroot\_list\_enable=YES

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

We’ll then add the following to ***/etc/vsftpd.chroot\_list*** who will specify our privileged accounts:

Sudo nano /etc/vsftpd.chroot\_list

admin

havel-Windows

Then we can create accounts to use our FTP server. We’ll need to create an account for each user specified in ***vsftpd.chroot\_list*** and then we can create any other account we want who will be restricted to their own home directory.

Sudo adduser admin # Privileged account

Sudo adduser havel-Windows # Privileged account

Sudo adduser harry # Non privileged account

Now we can restart the VSFTPD service:

Sudo systemctl restart vsftpd

5. Testing the FTP server

On any client, we should be able to go to a web browser and enter <ftp://server-IP/>, which will request a username and password. Upon entering valid credentials for any of the previously created accounts, we will have access to the server.

To improve functionality and usability, it is recommended to use FileZilla to access the FTP server. FileZilla has been installed on the FTP server which is relatively self-explanatory and FileZilla clients have been tested on Windows to allow easy access to the server.