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How to Set up an FTP Server in Ubuntu Linux

Community Tested

Four Parts: Installing the FTP Framework | Configuring the FTP Server | Adding Usernames to the CHROOT List | Accessing Your Server

This wikiHow article will show you how to set up and connect to an FTP server from your Ubuntu Linux computer. FTP servers are useful for storing files from your computer and allowing others to browse them. In order to set up an FTP server from your computer, you'll need to have an FTP server host to which you can connect. It's also recommended that you update your Ubuntu software to the latest available version.

Part 1 Installing the FTP Framework

1 **Make sure that Ubuntu is up-to-date.** Ubuntu versions 17.10 and up have vastly different file paths than previous versions, so you'll need to upgrade to the latest version of Ubuntu if you haven't already done so: [1]

- Open **Terminal**
- Type in `sudo apt-get upgrade` and press Enter.
- Type in your password and press Enter.
- Type in `y` when prompted, then press Enter.
- Wait for the upgrades to finish installing, then restart your computer if prompted.

2 **Open Terminal.** Click the **Applications** menu ⁝⁝⁝, scroll down, and click the black-and-white **Terminal** icon to do so.

- You can also just press Alt + Ctrl + T to open Terminal.

3 **Enter the VSFTPD install command.** Type `sudo apt-get install vsftpd` into Terminal, then press Enter.

4 **Enter your password.** Type in the password that you use to log into your computer, then press Enter.

5 **Wait for VSFTPD to install.** This will take anywhere from 5 minutes to 20 minutes depending on your current FTP settings and your Internet connection, so be patient.

6 **Install FileZilla.** This is the program that you'll use to access and upload to your server. To install it:

- Type in `sudo apt-get install filezilla`
- Enter your password again if prompted.
- Wait for the installation to complete.

Part 2 Configuring the FTP Server

1 **Open the VSFTPD configuration file.** Type in `sudo nano /etc/vsftpd.conf` and press Enter. You'll be editing this file to allow (or disable) certain VSFTPD features.

2 **Allow local users to log into your FTP server.** Use the arrow keys to scroll down to the **`# Uncomment this to allow local users to log in.`** heading, then remove the "#" from the `local_enable=YES` line below it.[2]

- You can remove the "#" by using the arrow keys to select the letter in front of it (in this case, "w") and pressing the ← Backspace key.
- Skip this step if the `write_enable=YES` line is already white.

3 **Allow FTP write commands.** Scroll down to the `# Uncomment this to enable any form of FTP write command.` heading, then remove the "#" from the `write_enable=YES` line below it.

- Skip this step if `write_enable=YES` is already white.

4 **Disable ASCII mangling.** Scroll all the way down to the `# ASCII mangling is a horrible feature of the protocol.` heading, then remove the "#" from the following two lines:

- `ascii_upload_enable=YES`
- `ascii_download_enable=YES`

5 **Change the "chroot" settings.** Scroll down to the `# chroot)` heading, then add the following lines:

- `user_sub_token=$USER`
- `chroot_local_user=YES`
- `chroot_list_enable=YES`
- If any of these lines already exist, simply remove the "#" before each existing line.

6 **Change the default "chroot" settings.** Scroll down to the `(default follows)` heading, then add the following lines:

- `chroot_list_file=/etc/vsftpd.chroot_list`
- `local_root=/home/$USER/Public_html`
- `allow_writeable_chroot=YES`
- If any of these lines already exist, simply remove the "#" before each existing line.

7 **Enable the "ls recurse" option.** Scroll down to the `# You may activate the "-R" option...` heading, then remove the "#" from the `ls_recurse_enable=YES` line below it.

8 **Save and exit the text editor.** To do so:

- Press Ctrl + X
- Type `y`
- Press ↵ Enter

Part 3 Adding Usernames to the CHROOT List

1 **Open the "chroot" text file.** Type in `sudo nano /etc/vsftpd.chroot_list` and press ↵ Enter.

- You can skip to the last step in this part if you don't want to specify people who can access your FTP server.

2 **Enter your password.** Type in the password that you use to log into Ubuntu and press ↵ Enter. This will open the "chroot" text file.

- Skip this step if not asked for your password.

3 **Add usernames to the list.** Type in your own username, press ↵ Enter, and repeat with any other usernames of people whom you want to have access their Home directories from within your server.

4 **Save your list.** Press Ctrl + X, type in `y`, and press ↵ Enter. Your list will be saved.

5 **Restart VSFTPD.** Type in `sudo systemctl restart vsftpd` and press ↵ Enter. This will stop and restart VSFTPD, ensuring that your changes have been saved. You can now access your FTP server. [3]

Part 4 Accessing Your Server

1 **Determine your server's address.** If you're paying for an FTP server through a hosting service (e.g., Bluehost), you'll need to know the service's IP address or regular address in order to connect to it.[4]

- If you're hosting your own server from your computer, you'll use your computer's IP address, which you can figure out by entering `ifconfig` in Terminal and then reviewing the "inet addr" number.
  - If "ifconfig" isn't installed, you can install it by entering `sudo apt-get install net-tools` in Terminal.

2 **Forward a port on your router.** Once you know your server's IP address, you'll need to forward your router's port 21 slot to that address; make sure that the port uses TCP (not UDP or a mixture of the two).

- Port forwarding varies from router to router, so be sure to check the linked article or your router's documentation for instructions.

3 **Open Filezilla.** Type `filezilla` into Terminal and press Enter. After a moment, FileZilla will open.

- If you want to connect via Terminal, you can try typing in `ftp [address]`. As long as your server is running and you have Internet access, this will attempt to connect to your FTP server; however, you may not be able to transfer files.

4 **Click** File**.** It's in the top-left corner of the FileZilla window. Doing so prompts a drop-down menu.

5 **Click** Site Manager... **.** You'll find this option in the drop-down menu. The Site Manager window will open.

6 **Click** New Site **.** It's a white button in the lower-left side of the window. Doing so opens the New Site section of the Site Manager.

7 **Enter your server's address.** In the "Host:" text field, type in the address (or IP address) of the FTP server to which you want to connect.[5]

8 **Add the forwarded port number.** Type `21` into the "Port:" text field.

9 **Click** Connect **.** It's a red button at the bottom of the page. Doing so will prompt FileZilla to connect your computer to your FTP server.

10 **Move files onto the server.** You can click and drag folders from the left-hand window into the right-hand window to upload them to your FTP server page.

Community Q&A

Question

How do I restrict the FTP so only select users can log into the service?

wikiHow Contributor
Community Answer

Follow the directions in the vsftp.conf file. It will tell you exactly what to do. Anonymous access is disabled by default.

Question

How do I access the server?

wikiHow Contributor
Community Answer

> Install FileZilla and enter the IP address of your new FTP server in the Host. Then, put your username and password in and hit "Quick Connect." If you receive a message saying your connection was refused, make sure you have list=YES set in the vsftpd.conf file.

Tips

- Forwarding port 20 may resolve some network issues if you're hosting your own server.
- Connecting to an FTP server in Ubuntu 17 and up looks slightly different than connecting in previous versions, so you'll want to update your Ubuntu version to 17.10 (or higher) if you haven't already done so.

Warnings

- FTP servers aren't always secure, especially if you're hosting one yourself. As such, refrain from uploading sensitive or personal information to an FTP server.

Sources and Citations

1. https://www.linux.com/learn/linux-101-updating-your-system
2. https://websiteforstudents.com/setup-vsftpd-ubuntu-17-04-17-10/
3. https://help.ubuntu.com/lts/serverguide/ftp-server.html
4. http://www.overclock.net/forum/142-coding-programming/639765-finding-ip-address-ftp-server.html
5. https://my.bluehost.com/hosting/help/264