

DOCUMENTATION > REMOTE-ACCESS > FTP

## FTP

FTP (File Transfer Protocol) can be used to transfer files between a Raspberry Pi and another computer. Although with default program `sftp-server` of Raspbian the users with sufficient privilege can transfer files or directories, access to the filesystem of the limited users is also required often. Follow the steps below to set up an FTP server:

### INSTALL PURE-FTPD

First, install `Pure-FTPD` using the following command line in Terminal:

```
sudo apt-get install pure-ftpd
```

### BASIC CONFIGURATIONS

We need to create a new user group named `ftpgroup` and a new user named `ftpuser` for FTP users, and make sure this "user" has **no** login privilege and **no** home directory:

```
sudo groupadd ftpgroup
sudo useradd ftpuser -g ftpgroup -s /sbin/nologin -d /dev/null
```

### FTP HOME DIRECTORY, VIRTUAL USER, AND USER GROUP

For instance, make a new directory named `FTP` for the first user:

```
sudo mkdir /home/pi/FTP
```

Make sure the directory is accessible for `ftpuser`:

```
sudo chown -R ftpuser:ftpgroup /home/pi/FTP
```

Create a virtual user named `upload`, mapping the virtual user to `ftpuser` and `ftpgroup`, setting home directory `/home/pi/FTP`, and record password of the user in database:

```
sudo pure-pw useradd upload -u ftpuser -g ftpgroup -d
/home/pi/FTP -m
```

A password of that virtual user will be required after this command line is entered. And next, set up a virtual user database by typing:

```
sudo pure-pw mkdb
```

Last but not least, define an authentication method by making a link of file `/etc/pure-ftpd/conf/PureDB`, the number `60` is only for demonstration, make it as small as necessary:

Restart the program:

```
sudo service pure-ftpd restart
```

Test it with an FTP client, like FileZilla.

## MORE DETAILED CONFIGURATIONS:

The configuration of Pure-FTPd is simple and intuitive. The administrator only needs to define the necessary settings by making files with option names, like

`ChrootEveryone`, and typing `yes`, then storing in the directory `/etc/pure-ftpd/conf`, if all FTP users are to be locked in their FTP home directory (`/home/pi/FTP`). Here are some recommended settings:

```
sudo nano /etc/pure-ftpd/conf/ChrootEveryone
```

Type `yes`, and press `Ctrl + x`, `y`, and Enter.

Likewise,

Make a file named `NoAnonymous` and type `yes`;

Make a file named `AnonymousCantUpload` and type `yes`;

Make a file named `AnonymousCanCreateDirs` and type `no`;

Make a file named `DisplayDotFiles` and type `no`;

Make a file named `DontResolve` and type `yes`;

Make a file named `ProhibitDotFilesRead` and type `yes`;

Make a file named `ProhibitDotFilesWrite` and type `yes`;

Make a file named `FSCharset` and type `UTF-8`;

...

Restart `pure-ftpd` again and apply the above settings.

```
sudo service pure-ftpd restart
```

For more information of Pure-FTPd and documentation, please get on official website of [Pure-FTPd](#).

[VIEW/EDIT THIS PAGE ON GITHUB](#)  
[READ OUR USAGE AND CONTRIBUTIONS POLICY](#)



### ABOUT

About us  
Team

### SUPPORT

Help  
Documentation

### CONTACT

Contact us

### SOCIAL

Twitter  
Facebook

- [BLOG](#)
- [DOWNLOADS](#)

[Downloads](#)[FAQs](#)
- [COMMUNITY](#)
- [HELP](#)
- [FORUMS](#)

[vimeo](#)[YouTube](#)
- [EDUCATION](#)

RASPBERRY PI FOUNDATION  
UK REGISTERED CHARITY 1129409

[Cookies](#) [Trademark rules and brand guidelines](#)