

**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!**

DEPLOY NOW

# How to Set up FTP Server on Your Raspberry Pi

April 6, 2021

FTP RASPBIAN SERVER

[Home](#) » [Networking](#) » How to Set up FTP Server on Your Raspberry Pi **Contents**

## Introduction

FTP (File Transfer Protocol) is a network protocol used to transfer files between two machines. Setting up an FTP server on Raspberry Pi is simple but make sure you do not transfer sensitive data as this protocol does not use encryption.

**In this tutorial, you will learn to set up an FTP server on your Raspberry Pi.**

**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!**

DEPLOY NOW

## How to Set up FTP Server on Your Raspberry Pi



### Prerequisites

- Raspberry Pi OS installed on your device
- Memory card
- Network connection
- Account with root privileges

## Raspberry Pi FTP Server Setup Guide

Setting up the FTP server requires:

1. A server utility.
2. Changes in some configuration files.
3. Setting up the server directory.
4. Modifying permissions for the server user.



**Note:** When you want to make sure your file transfers are secured, it is better to use SFTP (Secure File Transfer Protocol) over SSH. Check out our tutorials to learn [how SSH works](#) or [how to enable SSH on Raspberry Pi](#).

Follow these steps to set up an FTP server on your Raspberry Pi:

### Step 1: Update System Packages

**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!**

DEPLOY NOW

```
sudo apt update
```



```
sudo apt full-upgrade
```



Confirm with **Y** and wait for the upgrade to complete.

## Step 2: Install FTP Server

There are several utilities available for setting up an FTP server on Raspberry Pi. In this tutorial, we will use the open-source **vsftpd** utility.

The vsftpd utility is lightweight, secure, and easy to use.

Install **vsftpd** on the Raspberry Pi by running:

```
sudo apt install vsftpd
```



Wait for the installation to complete.



**Note:** Learn how to [install the vsftpd utility on Ubuntu](#) and set up an FTP server on popular Linux distribution.

## Step 3: Edit Configuration File

Before connecting to the FTP server, modify the settings in the **vsftpd configuration file** using a text editor, for example, nano.

1. Run the following command:

```
sudo nano /etc/vsftpd.conf
```



**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!****DEPLOY NOW**

```
# The default compiled in settings are fairly paranoid. This sample file
# loosens things up a bit, to make the ftp daemon more usable.
# Please see vsftpd.conf.5 for all compiled in defaults.
#
#
# Run standalone? vsftpd can run either from an inetd or as a standalone
# daemon started from an initscript.
listen=NO
^G Get Help  ^O Write Out ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos
^X Exit      ^R Read File ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line
```

2. Find (**CTRL + W**) and uncomment the following lines by removing the hash (#) sign:

write\_enable=YES

local\_umask=022

chroot\_local\_user=YES

3. Find the following line:

anonymous\_enable=YES

Change it to:

anonymous\_enable=NO

4. Add the following lines at the end of the config file:

user\_sub\_token=\$USER

local\_root=/home/\$USER/FTP

**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!**

DEPLOY NOW

## Step 4: Create FTP Directory

Create an FTP directory to use for transferring files. A subdirectory is needed since the root directory cannot have write permissions.

Use the following syntax:

```
mkdir -p /home/[user]/FTP/[subdirectory_name]
```



Replace **[user]** with the relevant user. Replace **[subdirectory\_name]** with a name of your choice. The default user on Raspberry Pi OS is 'pi.'

For example:

```
pi@raspberrypi:~ $ mkdir -p /home/pi/FTP/files
pi@raspberrypi:~ $
```

The **-p** argument instructs **mkdir** to create the entire path tree, both *FTP* and *files* directories.

## Step 5: Modify Permissions

After adding the directory, **remove the write permission** from the FTP directory to prevent other users from adding files to it.

Use the following syntax:

```
chmod a-w /home/[user]/FTP
```



Replace the **[user]** syntax with the appropriate username.

For example:

```
pi@raspberrypi:~ $ chmod a-w /home/pi/FTP
pi@raspberrypi:~ $
```

## Step 6: Restart Vsftpd Daemon

To apply the changes, **restart the vsftpd daemon** by running:

**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!****DEPLOY NOW**

Now the FTP server is set up and running on the Raspberry Pi.

## FTP Server Test

Test the server using a remote machine and **FileZilla**, a popular FTP client that supports all platforms.

Follow these steps:

1. **Install** FileZilla on a remote machine.

For example, on Ubuntu, run the command:

```
sudo apt install filezilla
```

Confirm with **Y** and wait for the installation to complete.

2. Obtain the Pi's **IP address** by running the following command in the Raspberry Pi terminal:

```
ifconfig
```

```
pi@raspberrypi:~ $ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::f77d:e727:1ea9:e4a2 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:38:b1:fe txqueuelen 1000 (Ethernet)
    RX packets 45736 bytes 62924455 (60.0 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 20890 bytes 1272758 (1.2 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

In this case, we used the private IP address to connect locally.

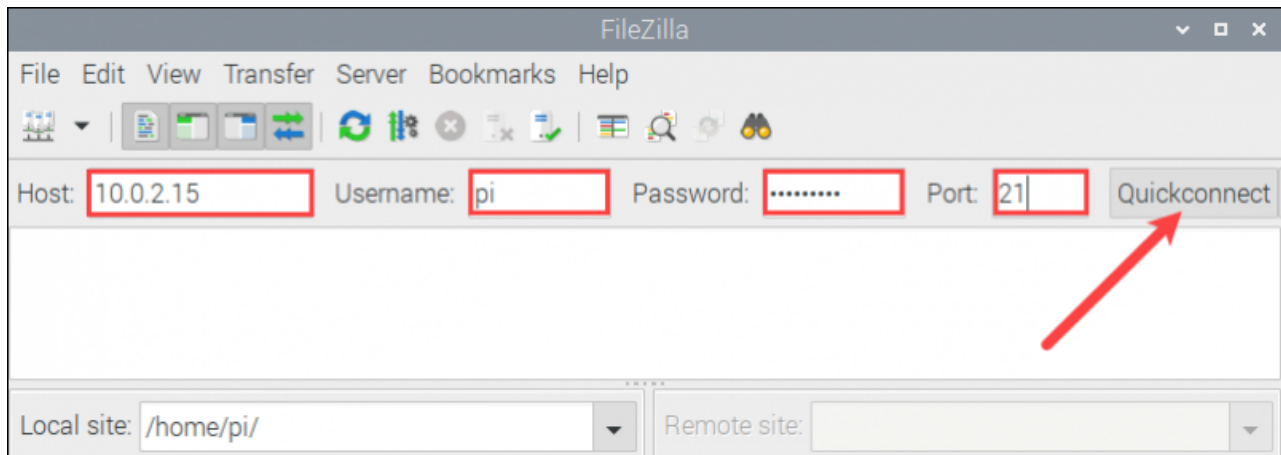
Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!



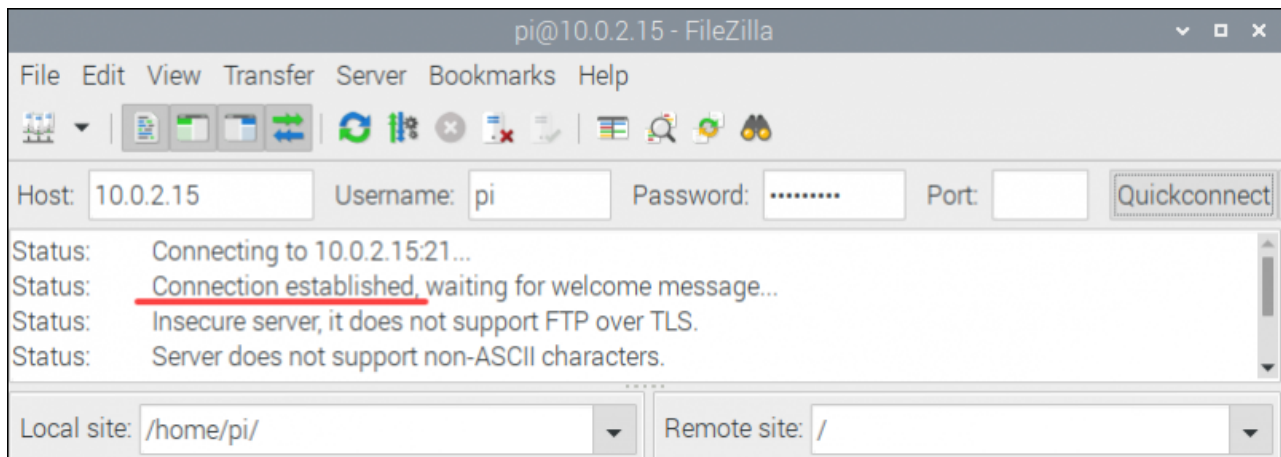
DEPLOY NOW

password is raspberry. Port number is 21.

Click **Quickconnect** to establish a connection.



If the connection is successful, a message stating *Connection established* appears in the log.

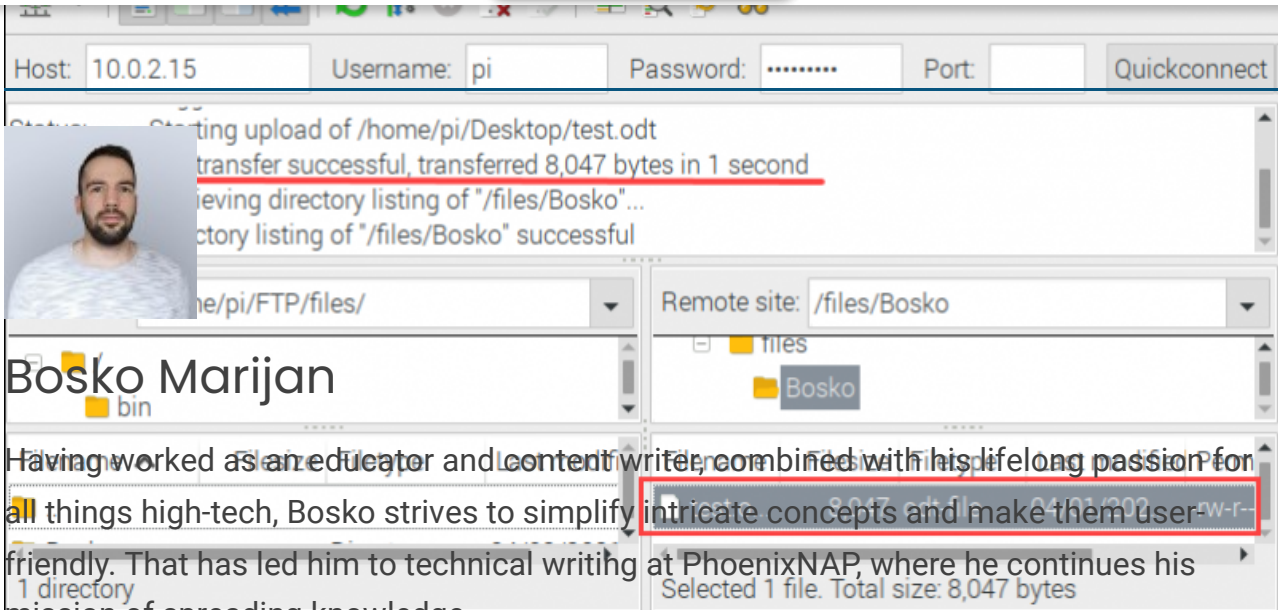


4. On the remote machine, drag and drop some files from a source to the destination directory in FileZilla to make sure the connection is working.

Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!



DEPLOY NOW



Having worked as an educator and content writer, combined with his lifelong passion for all things high-tech, Bosko strives to simplify intricate concepts and make them user-friendly. That has led him to technical writing at PhoenixNAP, where he continues his mission of spreading knowledge.

If everything works, FileZilla states that the file transfer was successful. Our example is for a local transfer, but the procedure is the same in other cases.

## Next you should read

## Conclusion

Networking, SysAdmin

### How To Set Up

### Raspberry Pi As A DNS Server

March 31, 2021

Learn how to improve your network speed by setting up a Raspberry Pi as a DNS server in this step-by-step...

[READ MORE](#)

DevOps and  
Development,  
SysAdmin

### How to Install Java on Raspberry Pi

Set up an FTP server on your Raspberry Pi. The solution is simple transferring files between two computers. You can use this setup as long as you want to keep the costs low.

Yes

No



**Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!**[DEPLOY NOW](#)

This article guides you through the Java installation process on Raspberry Pi. You will also learn how to set...

[READ MORE](#)

[DevOps and Development, SysAdmin, Virtualization](#)

## **How to Install Docker on Raspberry Pi**

December 12, 2019

If you want to install Docker on Raspberry Pi, that is on its Raspian system, you need to use the automated...

[READ MORE](#)

[SysAdmin, Web Servers](#)

## **How To Install an FTP Server on CentOS 7 With VSFTPD**

February 28, 2019

In this updated Tutorial, learn how to Setup FTP Server with VSFTPD on CentOS 7.

Get 15 TB FREE bandwidth (5 TB in Singapore) with Bare Metal Cloud!



DEPLOY NOW

READ MORE



Live Chat



Get a Quote



Support | 1-855-330-1509



Sales | 1-877-588-5918

Contact Us

Legal

Privacy Policy

Terms of Use

DMCA

GDPR

Sitemap

© 2022 Copyright phoenixNAP | Global IT Services. All Rights Reserved.