

FTP Server Setup Tutorial (Windows)

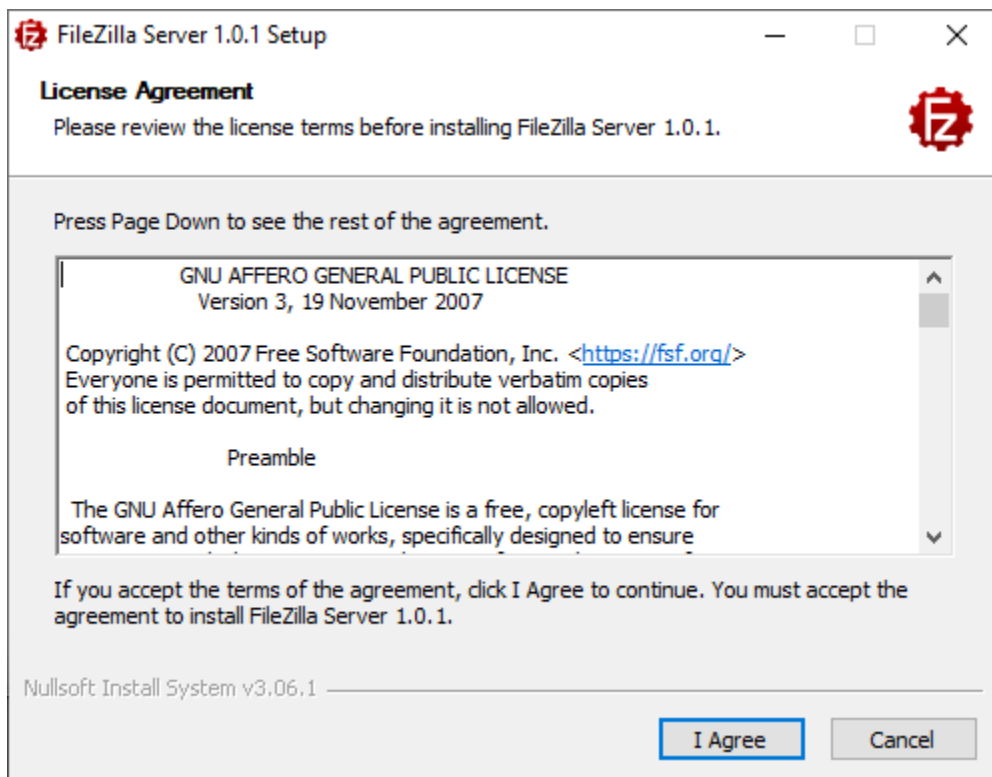
1. Download FileZilla Server for Windows

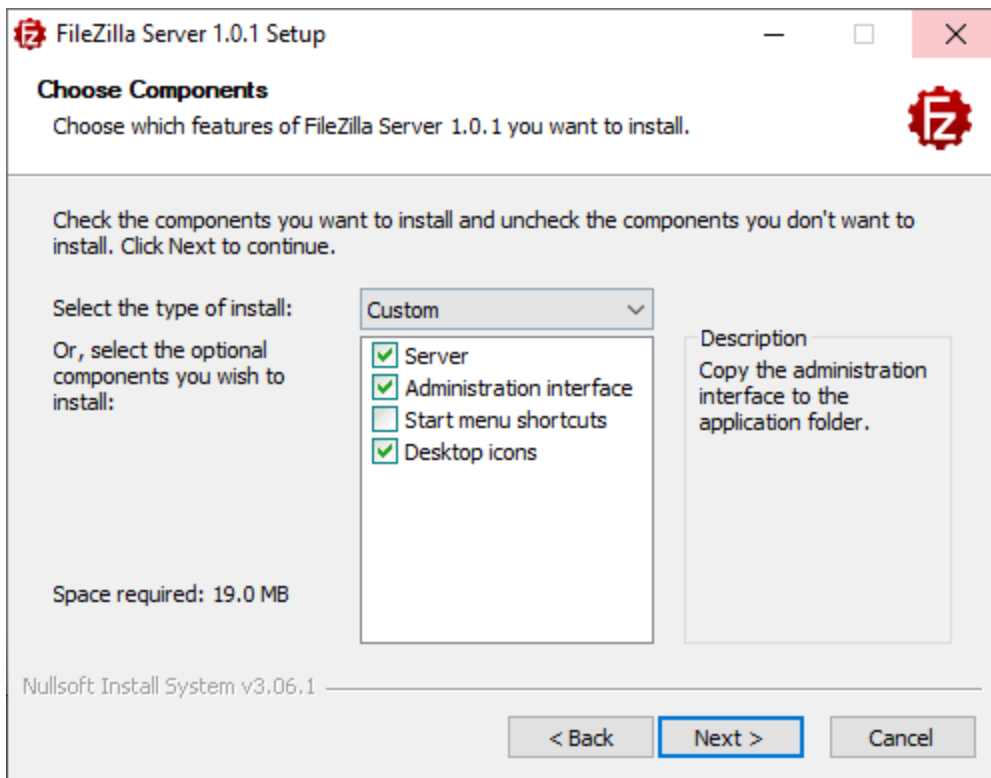
Go to this link: <https://filezilla-project.org/download.php?type=server>

And click the large green button for “Download FileZilla Server”. It should download an executable

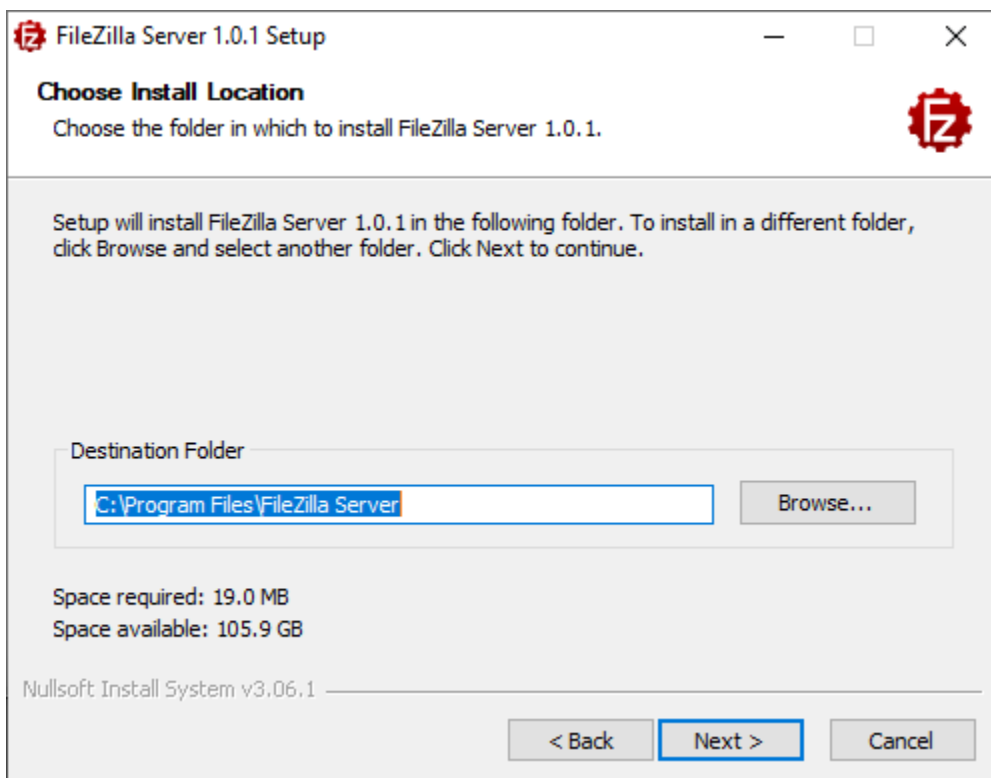
2. Installing FileZilla


The following screenshots show the steps required during installation





Note: I recommend keeping the start menu or desktop icon since the windows taskbar search failed to find it after my installation



 FileZilla Server 1.0.1 Setup

Server settings
FileZilla Server settings

Please choose how FileZilla Server should be installed and started:

Install as service, started with Windows (default) ▾

☒ Start server after setup completes

Please choose the listening port for the administration interface (1025-65535):

14148


Please choose the administration password, or leave the field blank for no password:

Please retype the chosen password:

Nullsoft Install System v3.06.1

< Back **Next >** Cancel

This port and admin password are only used by the host machine (not clients). Can be left as defaults/empty.

 FileZilla Server 1.0.1 Setup

Admin Settings
FileZilla Server's administration interface settings

Please choose how the administration interface should be started:

Start if user logs on, apply to all users (default) ▾

☒ Start administration interface after setup completes

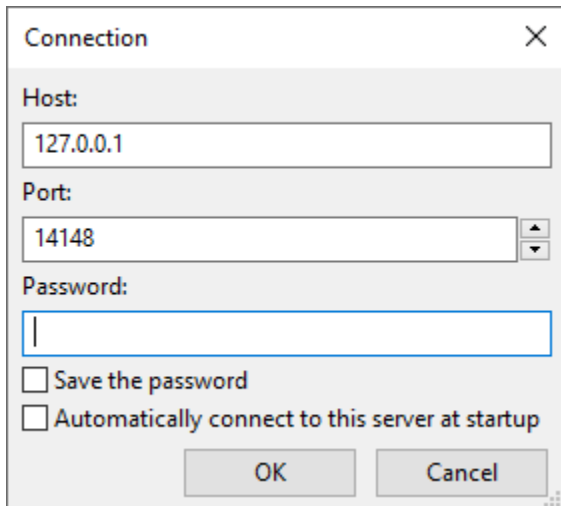
Nullsoft Install System v3.06.1

< Back **Install** Cancel

Keep defaults for last screen and install. Should launch the admin interface.

3. Configuring the FTP server

You should have FileZilla open at this point. Click “Connect to FileZilla FTP Server”. You will see this prompt. Fill it out with any changed settings from the installation step or leave as defaults. Press OK.

A screenshot of the FileZilla 'Connection' dialog box. The window has a title bar with 'Connection' and a close button. It contains three input fields: 'Host' with '127.0.0.1', 'Port' with '14148' and up/down arrows, and 'Password' which is empty. Below these are two checkboxes: 'Save the password' and 'Automatically connect to this server at startup', both of which are unchecked. At the bottom are 'OK' and 'Cancel' buttons.

Connection

Host:
127.0.0.1

Port:
14148

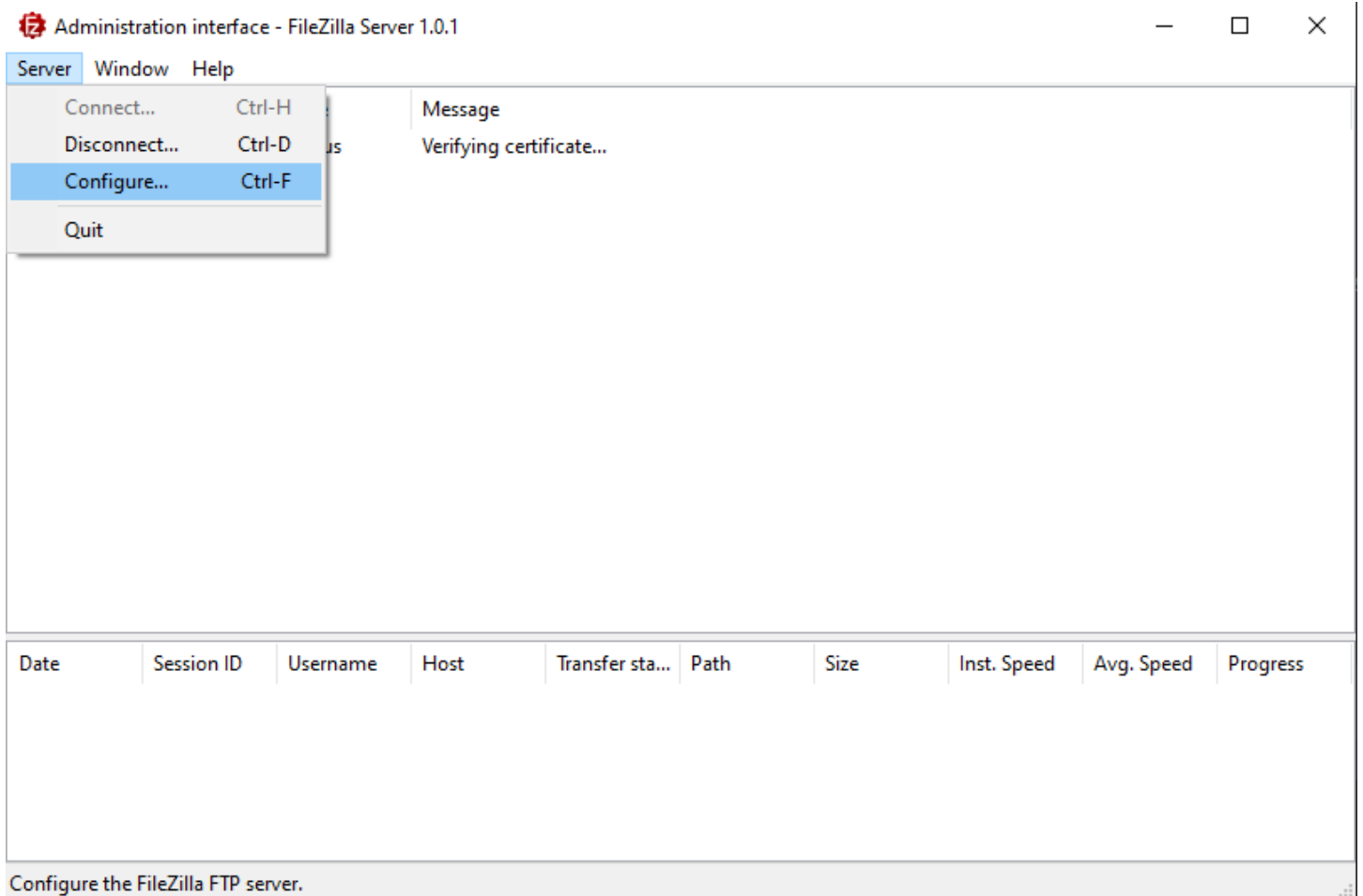
Password:
|

☐ Save the password

☐ Automatically connect to this server at startup

OK Cancel

Afterwards, you should see this Administration interface window appear, select Server -> Configure



The first screen will show the listeners used by the server. Leaving these as defaults is recommended but you could use this to change the ports used for communication.

Settings for server 127.0.0.1

FTP Server

Autoban

Timeouts

Security

Performance

Passive mode

Filters

Administration

Security

Groups

Users

Logging

Let's Encrypt®

FTP Server

Listeners:

Address	Port	Protocol
0.0.0.0	21	Explicit FTP over TLS and insecure plain FTP
::	21	Explicit FTP over TLS and insecure plain FTP

Add

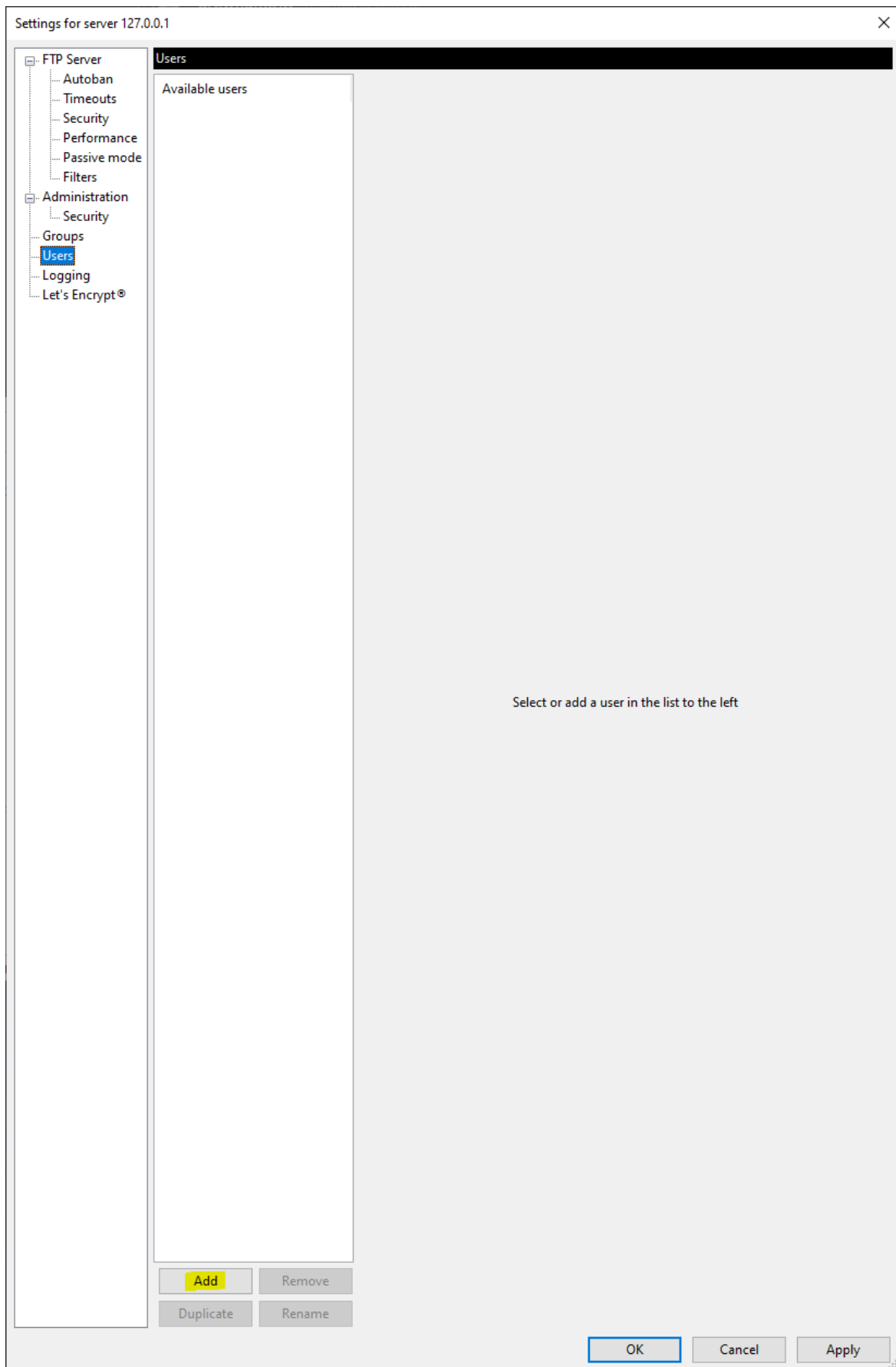
Remove

OK

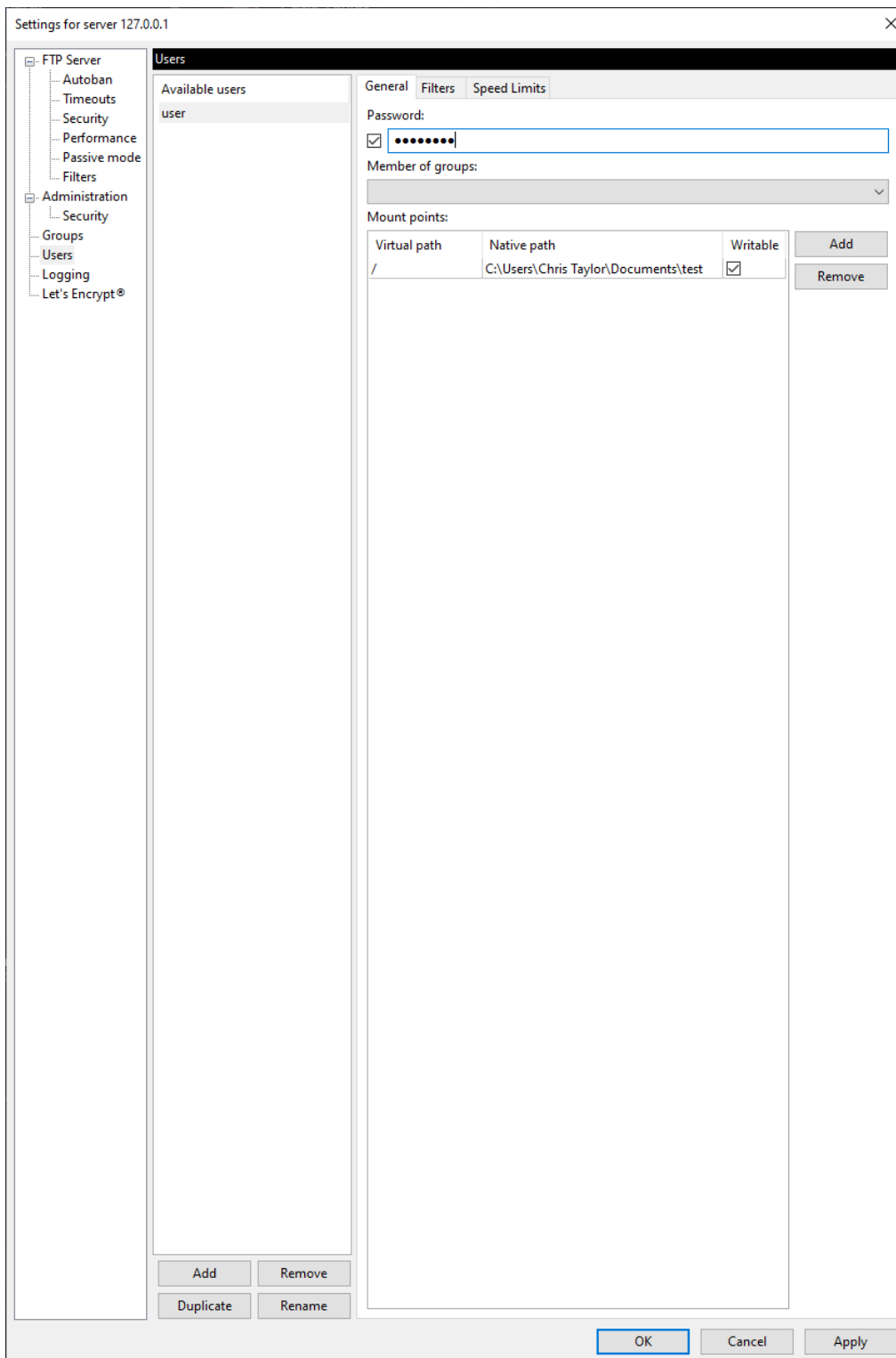
Cancel

Apply

Select “Users” on the side bar so you see the following settings. Select “Add” to create a new user.



From here, you can set your own username and password. In my case, I have the name as “user” and the password as “password.” This is the same username/password that will be used by your client code in order to connect. You must also create a mount point for the FTP server’s data to be stored. My virtual path is just “/” meaning all data is stored at the root directory (no cwd necessary when connecting) and the Native path can go anywhere on your host system (in my case a random folder in Documents). Make sure the “Writeable” checkbox is selected.

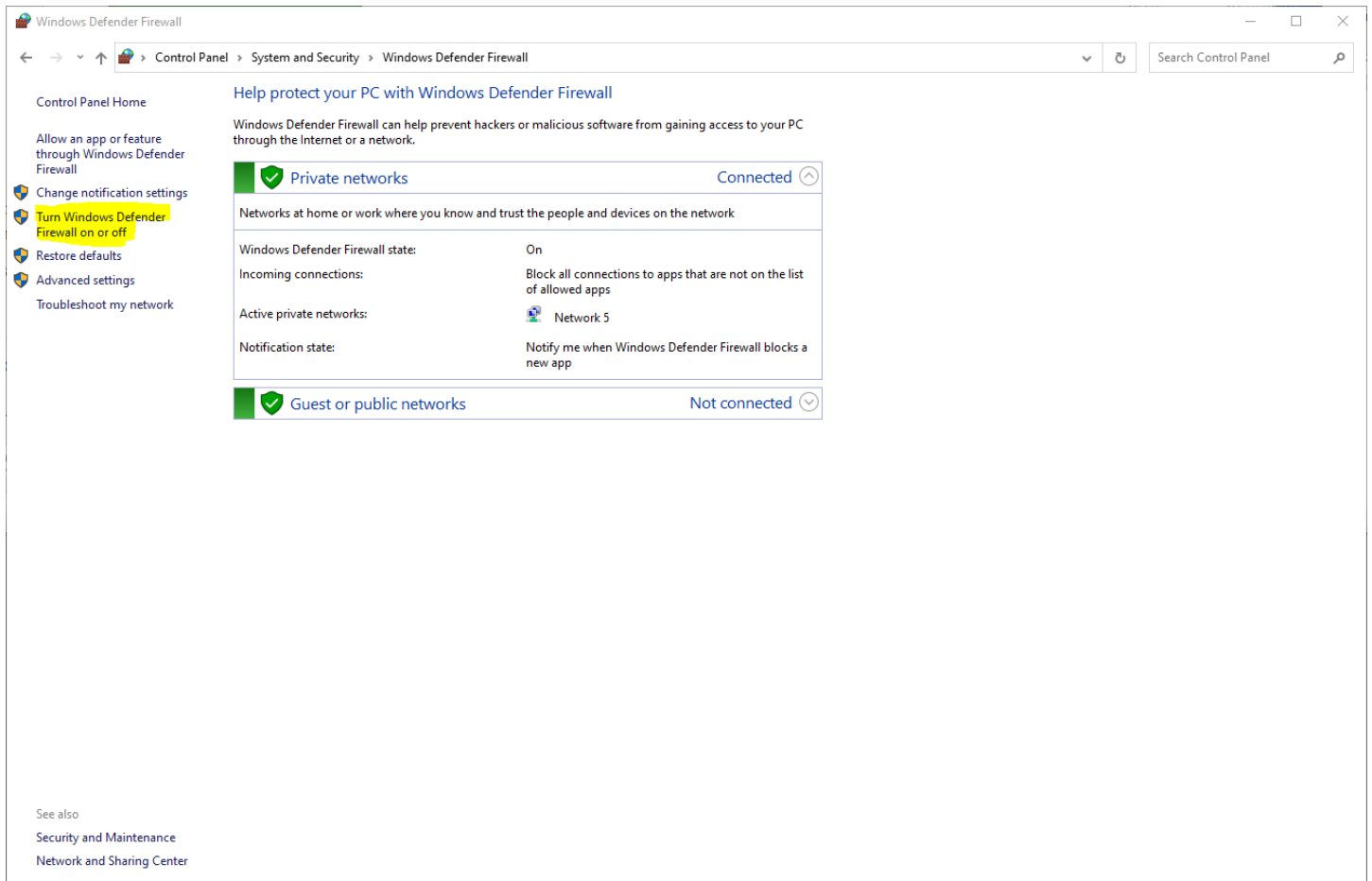


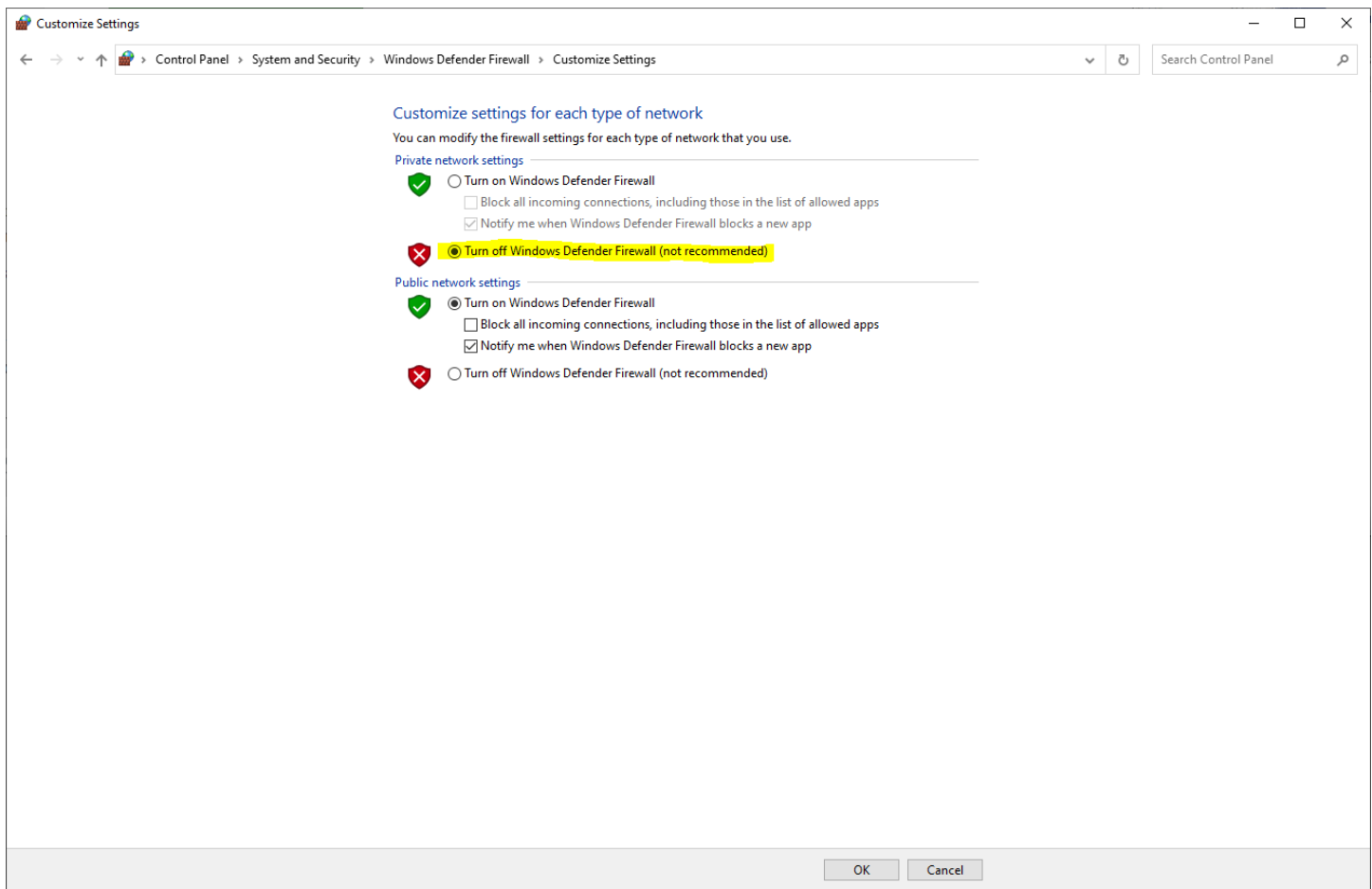
Select OK from the configuration screen and you should see a new line on the Administration interface that the settings have been changed.

4. Windows Firewall

If connecting from your FTP server from a machine other than the host, it is likely the windows firewall will prevent any connection. Follow these steps to disable it.

Search “Firewall” in the taskbar or navigate from the control panel the “Windows Defender Firewall settings.” From here, we will select “Turn Windows Defender Firewall on or off” and then disable it.



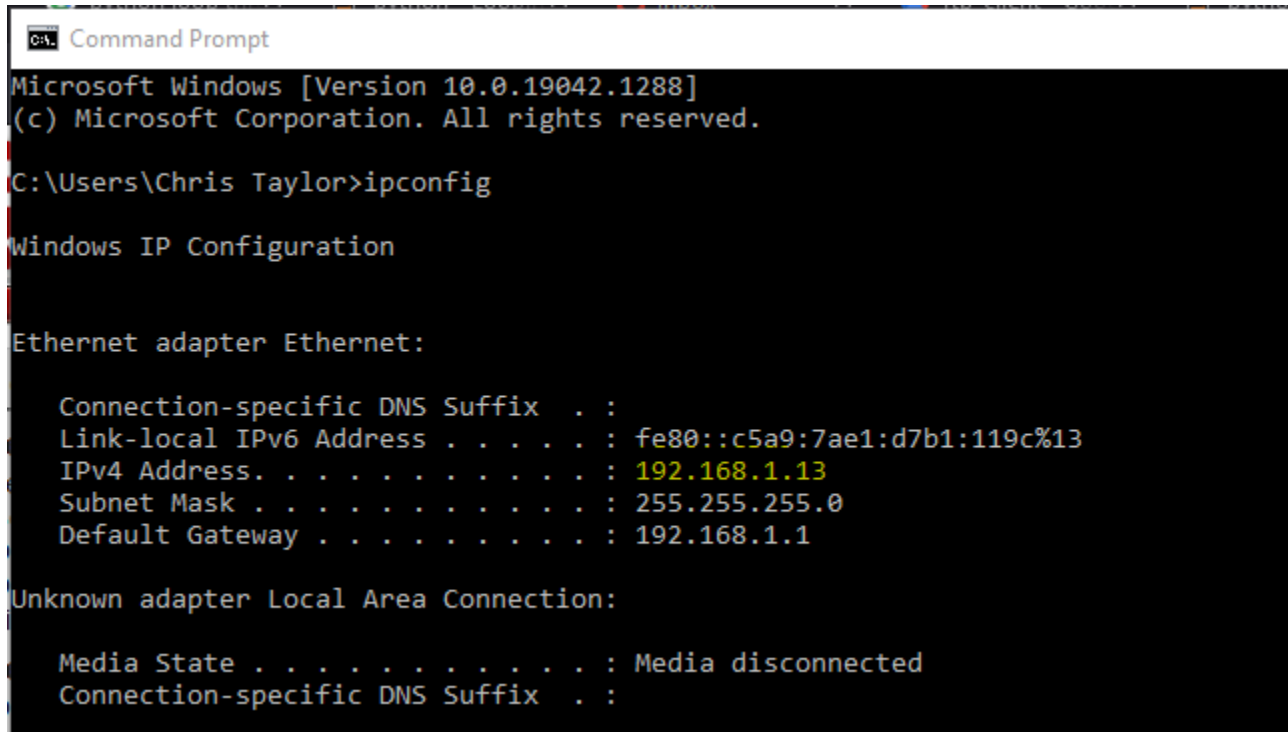


Please remember to re-enable your firewall when not hosting the FTP server!!!

5. Connect to the FTP Server

For any FTP client, you will need to know the server address, port, and a username/password.

The address of the server is the address of the host running the server. Open the windows command prompt and type “ipconfig” and look for the link-local IPv4 address.

A screenshot of a Windows Command Prompt window. The title bar says "Command Prompt". The text inside shows the Windows version and copyright information, followed by the command "ipconfig" being entered. The output shows the IP configuration for the Ethernet adapter, including the link-local IPv6 address, the IPv4 address (192.168.1.13), subnet mask, and default gateway. It also shows information for an unknown adapter (Local Area Connection) which is disconnected.

```
Microsoft Windows [Version 10.0.19042.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Chris Taylor>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::c5a9:7ae1:d7b1:119c%13
    IPv4 Address. . . . . : 192.168.1.13
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Unknown adapter Local Area Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :
```

To connect from outside your network would require port forwarding and connecting to your network’s public IP address (not covered here).

The port for FTP is 21 unless you made a change to the FTP Server listener settings.

The username and password used to log in will be what was set up at the end of step 3.

From here, you can test your FTP server with a program like MobaXTerm and starting an FTP session. You can also check to ensure your python environment on a raspberry can connect with the following basic script:

```
import ftplib

ftp_server = ftplib.FTP()
# Note: You will need to modify ip/port/credentials for
# whatever FTP server you configure. Also remember to
# create a mount point for the virtual path '/'.
# Also also remember you will probably have to disable
# windows defender firewall for FTP server on windows.
ftp_server.connect('192.168.1.13',21)
ftp_server.login('user','password')
ftp_server.dir()
```

If everything works, executing the above script should have some logs appears in the administration interface:

Administration interface - FileZilla Server 1.0.1									
Server Window Help									
Date	Info	Type	Message						
10/16/2021 ...	Admin UI	Status	Verifying certificate...						
10/16/2021 ...	FTP Sessio...	Command	USER user						
10/16/2021 ...	FTP Sessio...	Response	331 Please, specify the password.						
10/16/2021 ...	FTP Sessio...	Command	PASS ****						
10/16/2021 ...	FTP Sessio...	Response	230 Login successful.						
10/16/2021 ...	FTP Sessio...	Command	TYPE A						
10/16/2021 ...	FTP Sessio...	Response	200 Type set to A						
10/16/2021 ...	FTP Sessio...	Command	PASV						
10/16/2021 ...	FTP Sessio...	Response	227 Entering Passive Mode (192,168,1,13,4,147)						
10/16/2021 ...	FTP Sessio...	Command	LIST						
10/16/2021 ...	FTP Sessio...	Response	150 Starting data transfer.						
10/16/2021 ...	FTP Sessio...	Response	226 Operation successful						
Date	Session ID	Username	Host	Transfer sta...	Path	Size	Inst. Speed	Avg. Speed	Progress
10/16/2021 ...	2	user	192.168.1.13	idle					
10/16/2021 ...	3	user	192.168.1.13	idle					
Administration interface - FileZilla Server 1.0.1									