

Guide to File Transfer Protocol (FTP)

FTP is a way for you to send files between computers on the Internet. This guide will demonstrate how to use two popular methods of FTP.

For this document, the words *send*, *transfer*, and *upload* refer to the same thing.

When to use FTP?

1. Your Partek® Flow® server is hosted by partek.com (i.e. you are either a hosted customer or a trial customer) and you have data to analyze.

Although Partek Flow can be used to transfer small files (by selecting “My computer” on any file selection menu), Partek Flow is not designed for bulk file transfer. When uploading or downloading files within the Partek Flow user interface, it is the Web browser (Chrome, Safari, Firefox) which is responsible for transferring the files. This is not robust as any interruption to your web browser such as: encountering a transfer time limit, running a screen saver, or a network disconnection, will cause your data transfer to fail.

OR

2. You need to send data to Partek technical support for troubleshooting. For access to the technical support ftp area, refer to the instructions at <http://www.partek.com/SendData>

What do I need to do FTP?

1. The data you wish to send (typical examples are CEL, BAM, FASTQ, FASTQ.GZ, and ZIP files)
2. Your FTP account information. This will be e-mailed to you:
 - a.ftp host (example: <ftp.partek.com>)
 - b.username
 - c.password
3. FTP software (client) OR access to the command line -
Both options are further explained in the two methods below.

METHOD 1: Using FileZilla (highly recommended)

This method uses open-source software called FileZilla, a type of FTP client. Once installed, you can run it separately from the web browser or Partek Flow.

① *The screenshots below are from a Mac OS X but this guide applies to other operating systems.*

1. On your local computer, locate the data you intend to send (Figure 1).

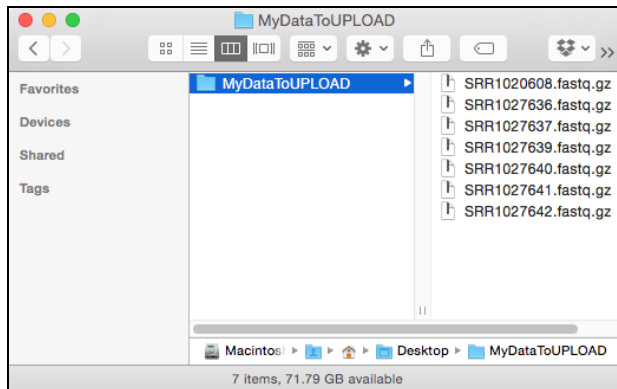


Figure 1: Example of files ready to be transferred

2. Download and install FileZilla from the links below. You need administrative privileges on your local computer.

Mac OSX:

http://www.partek.com/~devel/FileZilla_3.14.1_macosx-x86.app.tar.bz2

Windows 32-bit:

http://www.partek.com/~devel/FileZilla_3.14.1_win32-setup.exe

Windows 64-bit:

http://www.partek.com/~devel/FileZilla_3.14.1_win64-setup.exe

Linux:

Please use your distribution's package manager to install Filezilla, for example:

Ubuntu:

```
sudo apt-get update
sudo apt-get install filezilla
```

RedHat, see the following guide:

<http://juventusitprofessional.blogspot.com/2013/09/linux-install-filezilla-on-centos-or.html>

OpenSuse, see:

<https://software.opensuse.org/package/filezilla>

Note: Do not download FileZilla from sites other than the official site listed above. Some download aggregator sites (e.g. CNET download.com) have been known to bundle adware and other unwanted software products into the downloads they provide.

3. Start FileZilla and enter the host, username and password that you were provided with into the top of the Filezilla window as shown in Figure 2. Select **Quickconnect**.

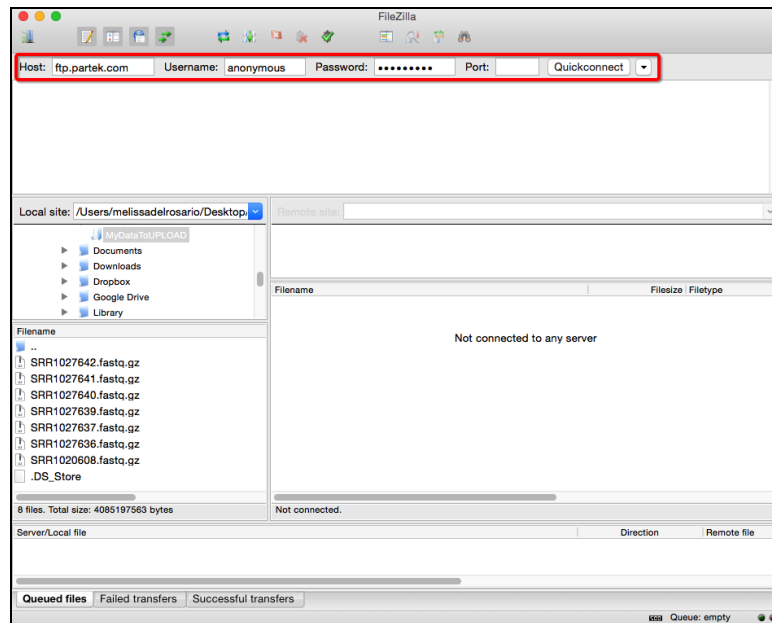


Figure 2: Entering the ftp host, username, and password.

4. Wait for successful connection (Figure 3) with the last line showing:

Status: Directory listing of "/" successful

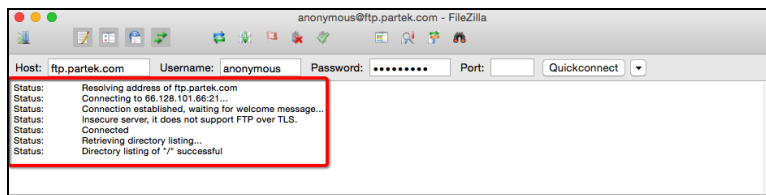


Figure 3: A successful FTP connection

5. The FileZilla client displays two window panes located in the lower part of the display each representing a computer involved in the file transfer. The left pane is your local site (your computer) where you currently have the data. The right side is the remote site (Partek server) where you want the data to go. On the local site, please navigate to the folder that contains your data to send. Select

the files from the left and drag them to the right (Figure 4). You may also create a new folder on the right side and drag the files to upload into that remote folder to keep things organized.

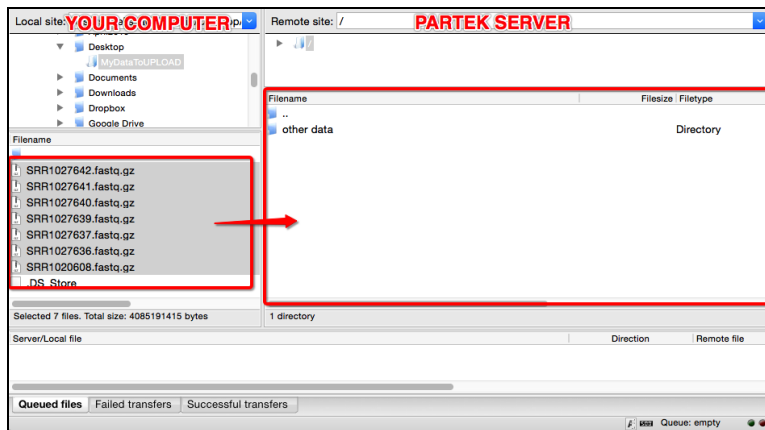


Figure 4: Selected files from the local computer (left) to be dragged to the remote computer (right)

6. The transfer begins and the Queue (Figure 5) will show the status of the transfer. You can queue multiple files at once but only two will be uploaded at a time. Depending on the size of the files and the Internet connection, the process can last from a few minutes to several hours.

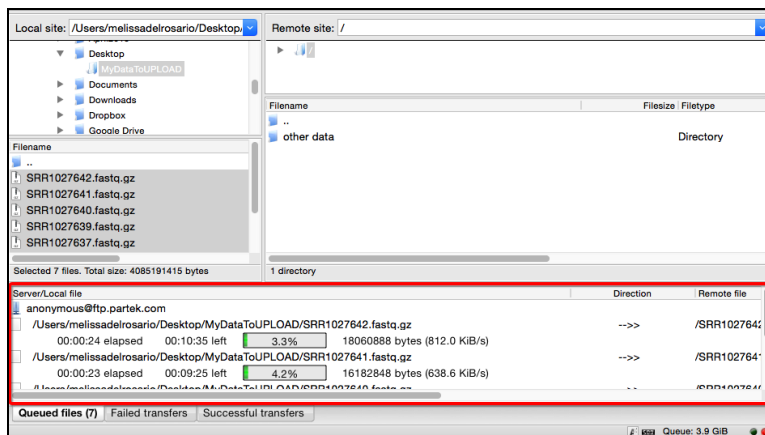


Figure 5: Data is being transferred as shown in the queue

7. The data transfer is finished (Figure 6) when the queue is empty and the number of successful transfers match the number of files you wanted to send. You should see all of your transferred files listed on the right side after clicking on the right window pane and selecting "Refresh."

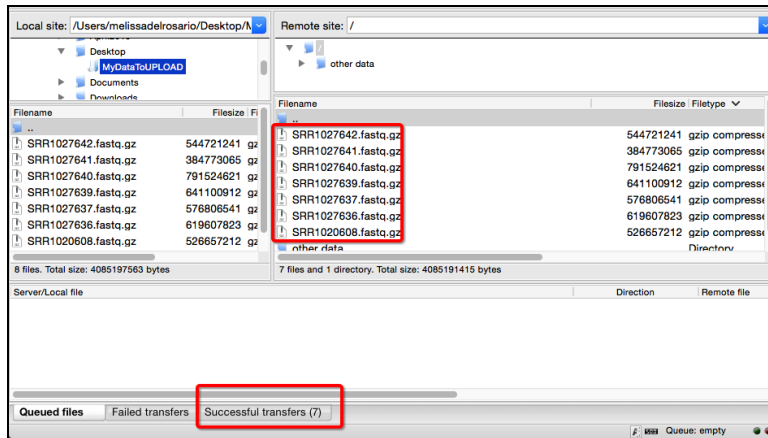


Figure 6: Data transfer is finished

- It is good practice to double-check the file sizes for each file. Compare the size of each file before and after transfer by looking at the file size on the left and comparing it to the file with the same name on the right (Figure 7). If you don't see the file sizes on either window, you may need to scroll to the right and adjust the columns.

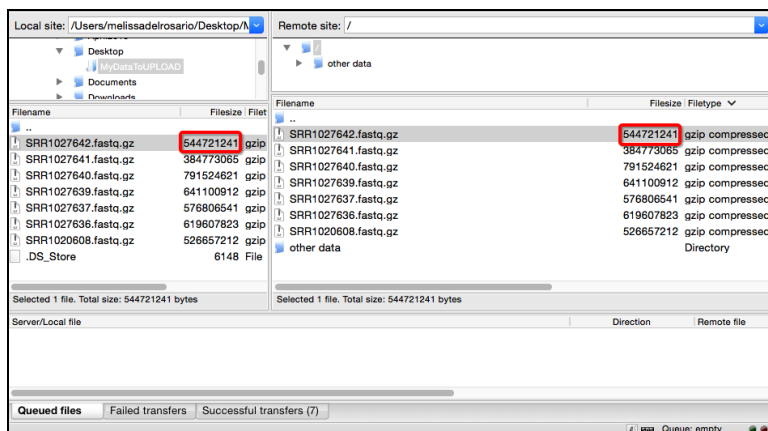


Figure 7. Checking file sizes

- (Optional). You may wish to reorganize files into a folder on your remote site. Right click on the remote (right) side and select **Create directory** (Figure 8) then enter a name. Select and drag your uploaded files on the right side into your new directory.

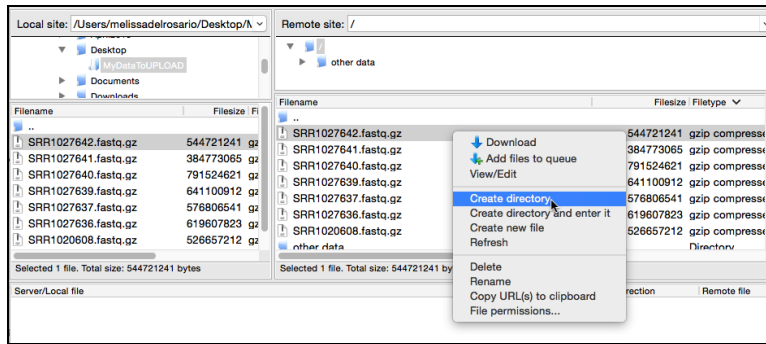


Figure 8. Creating a new directory in the remote site

Congratulations, you have successfully transferred your files.

METHOD 2: Using the DOS or Linux Prompt (for advanced users)

At the prompt, change directories (using the "cd" command) to the folder that contains the file(s) you are sending to Partek and enter the following commands. Replace the item in <brackets> with the name of the file you are sending.

```
ftp ftp.partek.com
name: (emailed to you)
password: (emailed to you)
binary
put <bigFile.zip>
bye
```