Using sftp to transfer files between computers
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sftp is a command-line program for transferring files between computers, for instance between your laptop and a server. sftp stands for s̲ecure f̲ile t̲ransfer p̲rotocol. sftp is a secure version of the older ftp command.

File transfer can go in both directions: you can upload files to the remote computer or download files to your local computer.

Connecting

Connecting to a computer with sftp uses the same syntax as connecting with ssh. For instance:

```
sftp mdstengl@thoth01.cvmbs.colostate.edu
```

You will be prompted to enter your password, like when you connect with ssh.

pwd and changing directories

In an sftp session you have a present working directory (pwd), just like when you are connected via ssh. To see your (remote) pwd, type `pwd`. To see your pwd on the local computer, use the `lpwd` (local pwd) command. Most sftp commands have a local version that starts with `l`. You can change directories using the `cd` or `lcd` commands.

Listing files

Some basic commands are available in sftp, these include `ls` to list the files and directories in the remote directory. `lls` lists files and dirs in your local pwd.

Uploading (putting) files

To transfer files from your local computer to the remote computer, use the `put` command. For instance:

```
put a_file_to_upload.txt
```

This will upload the file `a_file_to_upload.txt` to your remote pwd. Note that this file must be in your local pwd for this to work.

Downloading (getting) files

To download files from the remote computer, use the `get` command. For instance:

```
get a_file_to_download.txt
```

This will download the file `a_file_to_download.txt` from your remote pwd to your local pwd.

It is possible to get **multiple files** at once, using wildcards. For instance:

```
# get all the fastq!
get *.fastq
```

Beware: two file names: if you list exactly two file names, the program will download only the first file and *rename* it to the second file name. This doesn't apply when you are using wildcards, only if you use the file names directly.

Disconnecting: `quit` or `exit` stops the sftp session and disconnects.

Sftp commands

Remote sftp command	Local version	Purpose
cd	lcd	Change directory (change pwd)
pwd	lpwd	Show pwd
get		Download one or more files
put		Upload one or more files
ls	lls	List files and directories
quit or exit		Stop the sftp session (and disconnect)

For more information, see [this tutorial](#).