SFTP Crash Course

What is SFTP?

- A Program like scp, but allows you to navigate both the local and remote filesystems while in SFTP.
- A little easier to use sftp than scp, in my opinion.
- Should be installed already on most systems

Connecting to Vulcan using sftp

```
PS C:\Users\Dylan> sftp dylcal13@moat.cs.uab.edu dylcal13@moat.cs.uab.edu's password:
Connected to moat.cs.uab.edu.
sftp>
```

Navigating Vulcan using sftp

There are nine commands you really need to know to use an sftp session

- cd Changes your directory in vulcan
- Is shows you what's in the current directory on Vulcan
- Icd Changes your directory on your computer
- Ils Shows you whats in the current directory on your computer
- put uploads a file to the current location on vulcan
- get downloads a file to the current directory on your computer from vulcan
- help opens the help menu for more commands in sftp

Example: Downloading a File from Vulcan

```
PS C:\Users\Dylan> sftp dylcal13@moat.cis.uab.edu
dylcal13@moat.cis.uab.edu's password:
Connected to moat.cis.uab.edu.
sftp> pwd
Remote working directory: /home/UAB/dylcal13
sftp> cd CS330
sftp> cd lab1
sftp> ls
hello
        hello.c
sftp> lpwd
Local working directory: c:\users\dylan
sftp> lcd Desktop
sftp> get hello.c
Fetching /home/UAB/dylcal13/CS330/lab1/hello.c to hello.c
/home/UAB/dylcal13/CS330/lab1/hello.c
                                                                                   2.7KB/s
                                                                                             00:00
                                                                     100%
sftp> bye
```

Example: Downloading a File from Vulcan

pwd – finding out where I am on Vulcan

cd CS330 – going to the CS330 Folder on vulcan

cd lab1 – going to the lab1 Folder on vulcan

Is – listing available files in the lab1 folder on vulcan

Ipwd – finding out where I am on my computer

lcd Desktop – going into the desktop folder on my computer

get hello.c – Download the hello.c file and put it in the Desktop folder

bye – exit sftp

Example: Pushing a File to Vulcan

```
PS C:\Users\Dylan> sftp dylcal13@moat.cis.uab.edu
dylcal13@moat.cis.uab.edu's password:
Connected to moat.cis.uab.edu.
sftp> pwd
Remote working directory: /home/UAB/dylcal13
sftp> cd CS330
sftp> cd push_example
sftp> lpwd
Local working directory: c:\users\dylan
sftp> lcd Desktop
sftp> put hello.c
Uploading hello.c to /home/UAB/dylcal13/CS330/push_example/hello.c
hello.c
                                                                                  4.9KB/s
                                                                    100%
                                                                           79
                                                                                            00:00
sftp> bye
```

Example: Pushing a File to Vulcan

pwd – Find out what folder I'm in in Vulcan

cd CS330 – go into the CS330 folder on Vulcan

cd push_example – go into the folder I want to upload my file to

Ipwd – find out where I am on my computer

lcd – go into the Desktop folder

put hello.c – uploads the hello.c file to the push_example folder on Vulcan

bye – exits sftp

Additional Resources

- https://linuxize.com/post/how-to-use-linux-sftp-command-to-transfer-files/
- https://www.digitalocean.com/community/tutorials/how-to-use-sftp-to-securely-transfer-files-with-a-remote-server