Useful details: `sftp`

sftp **- secure file transfer program - how to transfer files to and from nrs-projects**

`sftp` (secure file transfer program) is used to transfer files between computers across a network. It allows you to connect to a remote computer and transfer files between it and the computer you connect to from wherever you are on the Internet.

You can use this to save backup copies of your nrs-projects files onto your own computer.

And -- if you prefer to type your SQL scripts on your own computer -- you can use this to transfer those scripts to nrs-projects to execute them using Oracle `sqlplus`.

...from Windows

WinSCP, installed in HSU campus labs, is a "graphical" implementations of `sftp`.

And, there is an open source version, FileZilla, which has versions for Windows and Mac OS X, available from:

https://filezilla-project.org/

For any of these choices of software, use `nrs-projects.humboldt.edu` as the host, and use your campus username, and your campus password. If WinSCP or FileZilla require a port number, enter a port number of `22`.

Once you have connected, you can drag files from the left side to the right side to move files from your computer to nrs-projects, and from the right side to the left side to move files from nrs-projects to your computer.

...from Mac OS X or Linux (or Windows 10 running bash?)

There are graphical sftp clients for these, too -- for example, FileZilla, which has versions for Windows and Mac OS X, is available from:

https://filezilla-project.org/

-- but I tend to just use their command-line versions (which should already be installed on your computer).

For the command-line approach, on Mac OS X, you'll want to open a terminal using the Terminal application (under Applications -> Utilities); if you use Linux, you probably already know how to open a terminal window under whatever version you are running.

Once you have a terminal window open, life is easier if you go to the directory (using the `cd` command) where the files are that you want to transfer. Then, type:

`sftp `*`your_hsu_username`*`@nrs-projects.humboldt.edu`

substituting your HSU username where indicated. Answer `y` for yes to agree if it asks you if its really okay to proceed, and type in your HSU campus password when indicated. (NOTE: your password will not show on the screen when you type it, for security reasons! It IS still being read in.)

Once you see the prompt:

`sftp>`

...you are now connected to nrs-projects using `sftp`, and can type `sftp` commands at this prompt. (Type the enter key to end an `sftp` command, and note that Unix is case-sensitive.)

Here are a few very useful `sftp` commands:

`cd` *directory_name*	change to directory *directory_name* **on nrs-projects**
`lcd` *directory_name*	(local `cd`) change to directory *directory_name* **on your (local) computer**
`pwd`	see the name of the current directory **on nrs-projects**
`lpwd`	(local `pwd`) see the name of the current directory **on your (local) computer**
`ls`	list the files in the current directory **on nrs-projects**
`lls`	(local `ls`) list the files in the current directory **on your (local) computer**
`put` *file_name*	transfer a copy of the file *file_name* <u>from **your**</u> computer **to** nrs-projects
`get` *file_name*	transfer a copy of the file *file_name* **<u>from</u>** nrs-projects <u>to **your**</u> computer
`?`	gives a list of sftp commands, each with a 1-line description
`quit`	exit `sftp`

It is good practice to quit (type the command `quit` or type the ctrl and d keys at the same time) when you are done.