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Instructions for server connection

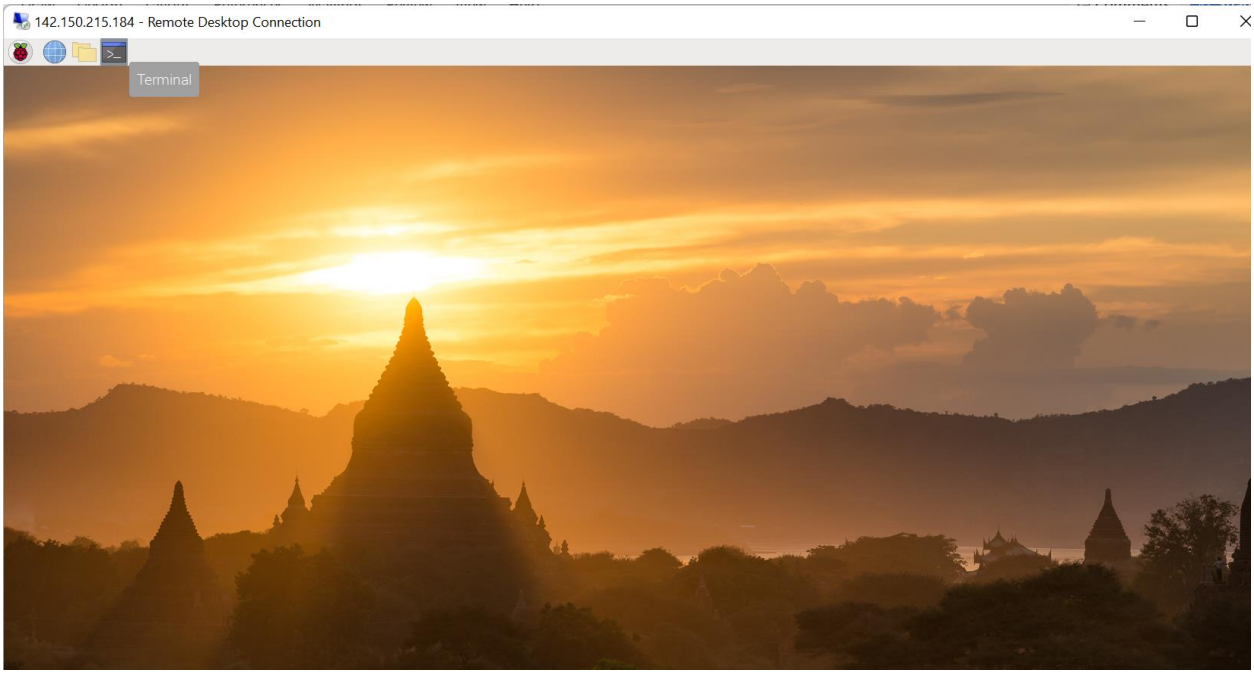
Modified from Tiago Lins

From Raspberry PI board:

Since the board is already connected to the department's internet, no VPN connection is needed for the board itself to connect with the server.

Accessing the server:

Open the terminal below



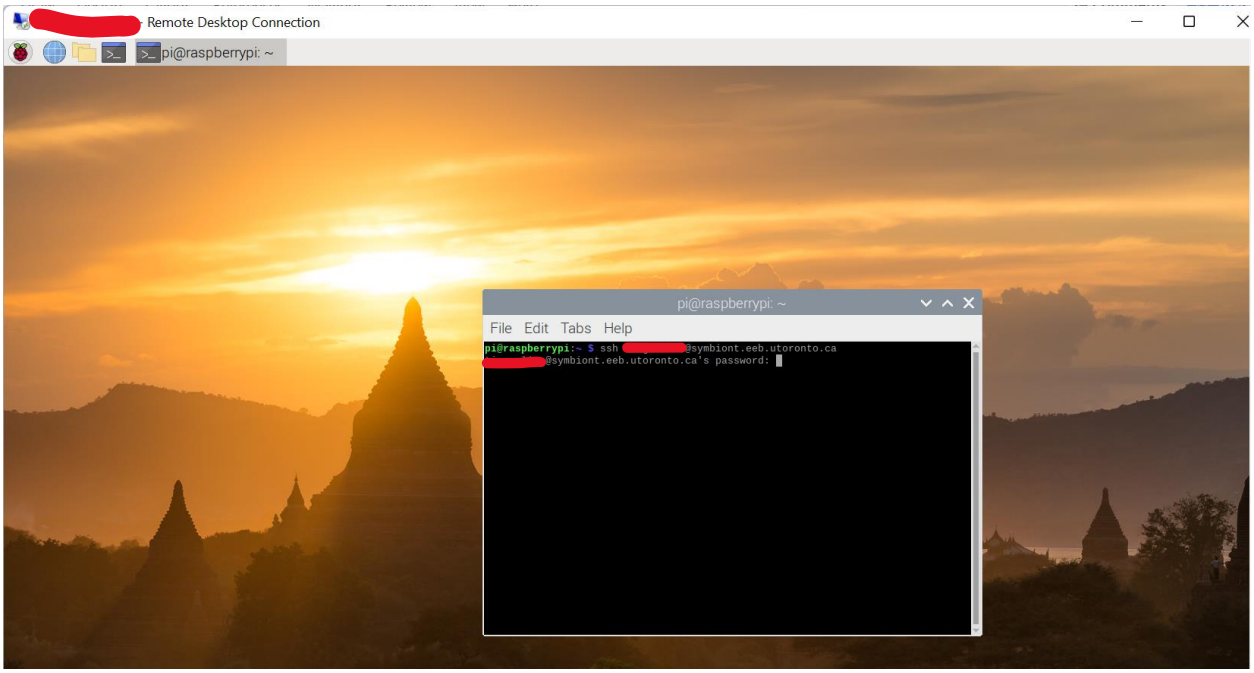
Type

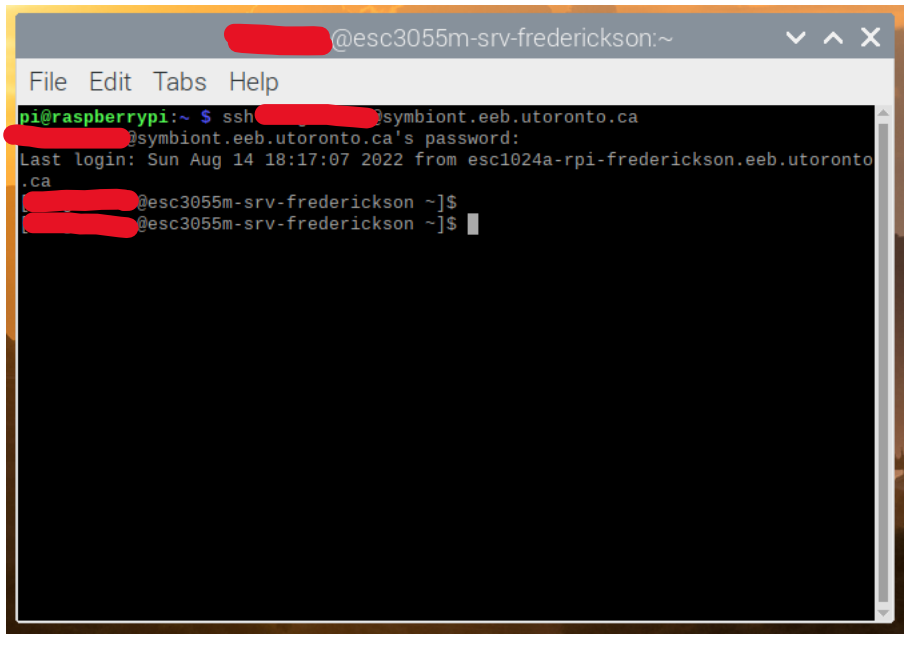
>ssh username@symbiont.eeb.utoronto.ca

or

>ssh username@ip_address

It will prompt you to write a password. As you type, you will notice nothing shows up, which is how it is supposed to work. Press Enter once you completed typing your password





Useful commands:

Check contents in the directory:

>ls

Opening a directory:

>cd *directory_name*

More Linux commands can be found online that works with this server

Copying and pasting

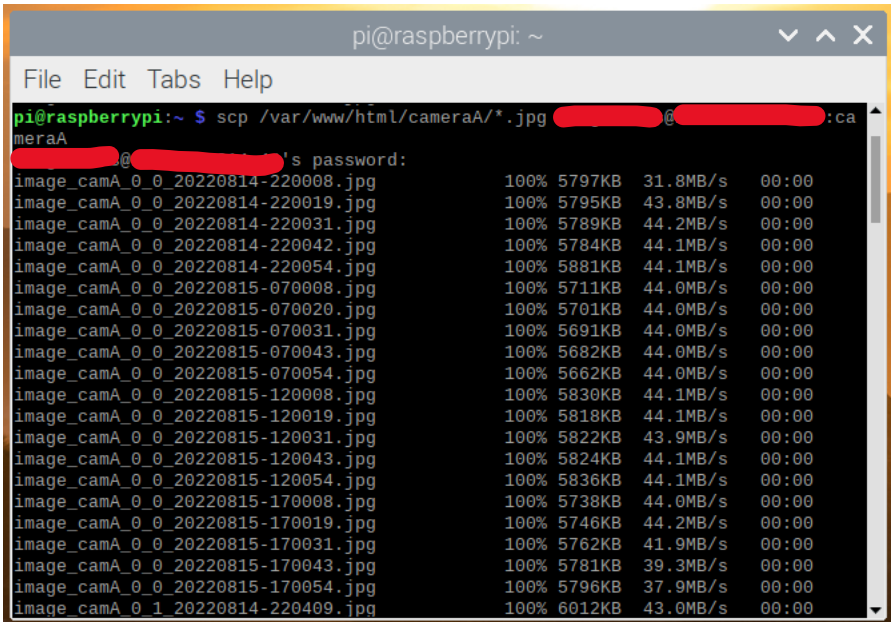
To copy a file into the server, write the following in the command line:

>scp home_address username@servername: server_address

The example below copies all files from camera A that end in ".jpg" in the board and copies them into the server in a directory name cameraA (same name, but not required):

>scp /var/www/html/cameraA/*.jpg username@ip:cameraA

It will also prompt you to type the password to complete the operation, just like using the ssh command. Once you press enter, the files will be loaded from the local computer to the server, as shown below:



[Tiago] also created an automated script that is already set to run everyday to upload data from all cameras (A, B, C, and D) into the server. You can also run it at anytime, by simply typing the following (it will not ask for password, as it will use Tiago's instead):

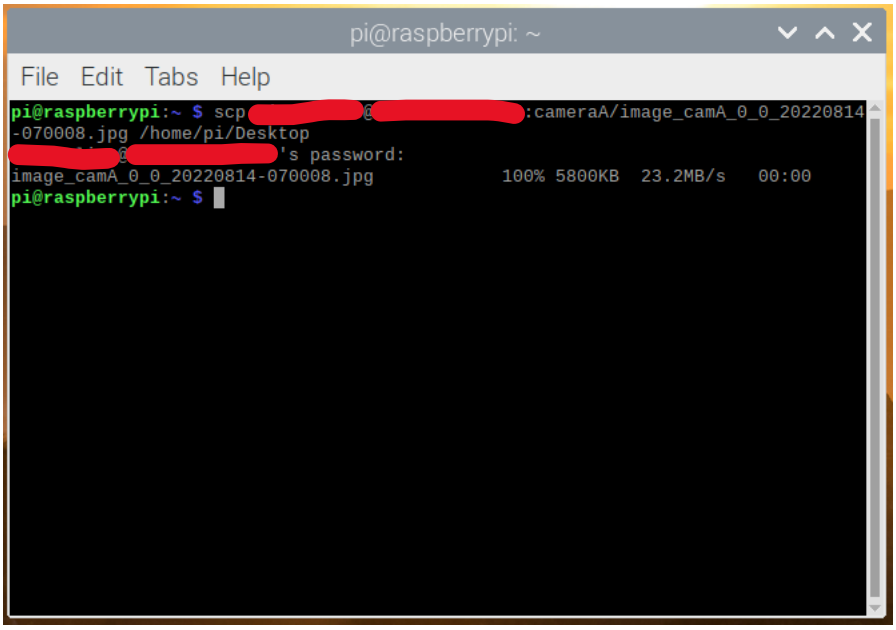
> expect autom.exp

To copy a file from the server, write the following:

>scp username@servername: server_address home_address

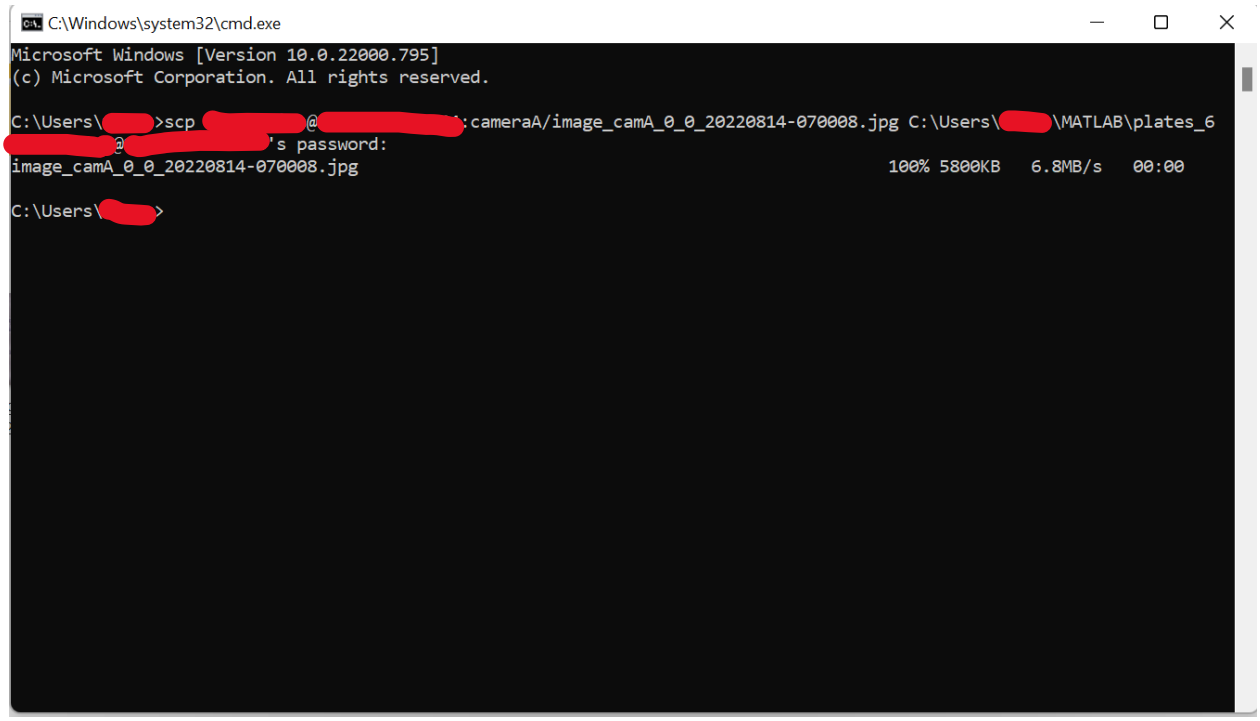
In the example below, I copied a single file named image_camA_0_0_20220814-070008.jpg into the desktop:

scp user@IP:cameraA/image_camA_0_0_20220814-070008.jpg /home/pi/Desktop



In Windows:

After connecting to the department's VPN via Wireguard, use a SSH client (i.e. PuTTY, Bitvise, etc). Once successfully connected to the server through the SSH, you can send and transfer files from PC to server or from serve to PC via the windows command prompt (Press Windows+R, type "cmd" and press enter). The command below, which is similar to the one used in Raspberry PI, works well in a PC too.



You should be able to use the same scp commands as shown previously to download and to upload files to and from the server.