Practical 2 - File transfer

Scenario: Your supervisor has supplied a file for you to process on the iCSF/CSF. You need to transfer this file to your home directory on the iCSF/CSF and make some minor changes.

Overview

We are going to:

- 1. Download a file from the course website to your laptop/PC
- 2. Upload the file from your laptop/PC to your home directory on the iCSF/CSF (Remember the iCSF & CSF Share the same home directory)
- 3. View the file on the iCSF and make some minor changes.
- **1. Everyone**: Download the file called "ex1file.txt" from: http://ri.itservices.manchester.ac.uk/course/icsf-csf to your laptop or PC. Follow the above link and Right-click on the 'ex1file.txt' link then choose the option 'Save link as' (or similar).

Make sure you know where you've saved it (the Downloads folder?)

If you have trouble downloading there is an alternative website linked at the top of the above webpage – this provides a copy of the same file.

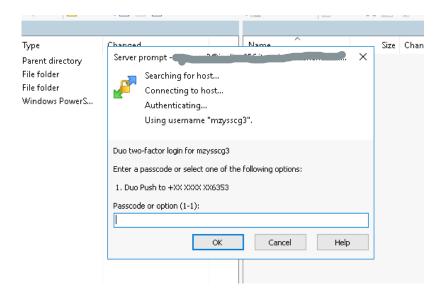
2. Everyone: Now upload the file to your home directory on the iCSF/CSF. Please follow the instructions below appropriate to your operating system:

Windows Users:

- Download and install WinSCP from the following link https://winscp.net/eng/download.php. PLEASE NOTE:
 When prompted for 'Select Install Mode' select 'Install for me only' and accept all defaults
- Open WinSCP it should be under Start > Programs
- Create a new session **New Session** and Enter the following information
 - File Protocol: SCP or SFTP
 - Host name: incline2000.itservices.manchester.ac.uk
 - User name: your University IT username
- Press 'Login' and enter your University IT password when prompted. IF prompted to accept host key select 'Yes'

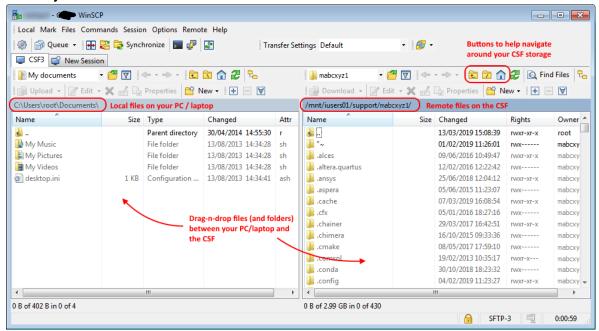
On-campus

- You will be prompted to perform 2FA, Enter '1' at the prompt and press Enter. Once the push notification has been received via the Duo mobile app 'Approve' the request to log on.



Off-campus

- If logging in from off-campus you will first need to be connected to the University VPN (GlobalProtect)
- You should now have a window consisting of a left pane which is your PC and right pane which is your home directory on the iCSF



- In the left-hand pane locate the ex1file.txt you have just downloaded.
- Drag the file from the left pane to the RHUMCOMPUTE directory in your iCSF/CSF home directory (right pane).
 Please Note, it does not remove the file from your PC, it copies it.
- Minimise the WINSCP window for now.

Linux and MacOS users:

- Open a new shell/terminal on your PC. On the command line move to the folder that contains the file "ex1file.txt"
- Now run the scp command in the new terminal to transfer the file to the CSF by running:

scp ex1file.txt username@incline2000.itservices.manchester.ac.uk:~/RHUMCOMPUTE

replace *username* with your central IT username and enter your *central IT password* when asked. Then press **1** at the DUO prompt and accept the push that appears on your mobile.) You will note that we are placing the file directly in the course folder in your home directory on the iCSF/CSF.

3. Everyone: We've uploaded a file from our laptop/PC to a directory in our home directory on the iCSF/CSF. Now lets view the file on iCSF

Open the iCSF terminal window via X2go (its should be minimised at the bottom from the previous exercise)

- Change to the workshop directory

[username@incline31 ~]\$ cd ~/RHUMCOMPUTE

- List the files, can you see the one you just transferred.

[username@incline31 ~/RHUMCOMPUTE]\$ ls -lh

The '-lh' is an option and it should tell you the size of the file and a date/timestamp of its creation.

- Read the file using the

[username@incline31 ~/RHUMCOMPUTE]\$ cat ex1file.txt

- Make a copy of the file

[username@incline31 ~/RHUMCOMPUTE]\$ cp ex1file.txt ex1file.copy

- Rename the file to give it a .R extension (Linux generally doesn't care what extensions you use but we want .R in this case so that rstudio will understand the file):

[username@incline31 ~/RHUMCOMPUTE]\$ mv ex1file.txt ex1.R

Now edit the file

[username@incline31 ~/RHUMCOMPUTE]\$ nano ex1.R

Add the following line to the end of the file and then save it.

print(t)

 Save the file (Ctrl+O), Press Enter, and exit with (Ctrl +X) nano. You should see the ex1.R file in the RHUMCOMPUTE directory folder