

Introduction to the CSF

Practical session 3: File transfer

Overview

We are going to:

1. Download a file from the CSF to our PC
2. Upload a file from our PC to the CSF

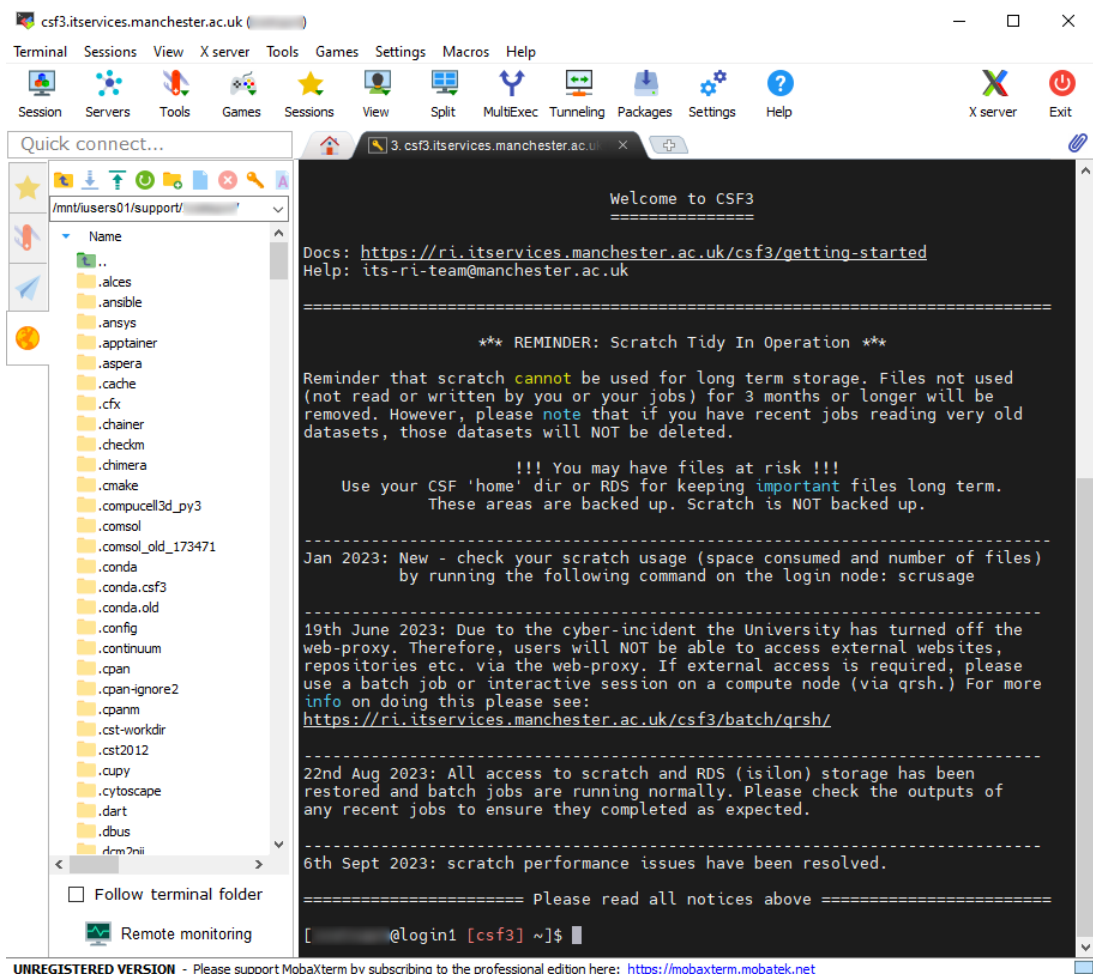
For more information on transferring files to/from the CSF, please see:

<https://ri.itservices.manchester.ac.uk/csf3/filesystems/file-transfer/>

Downloading an output file from the job run in exercise 2

Please follow the instructions appropriate to your operating system:

- **Windows Users:** You can do this in **three** different ways (try at least #1):
 - **Windows users (option 1):** Drag-n-drop in MobaXterm:
When you logged in to the CSF in your MobaXterm window, it will display your remote CSF *home* directory (see diagram below – the files on the CSF are displayed in the panel on the left-hand side).



- If you don't see the panel on the left-hand side, please ensure you connected to the CSF by creating a "Session" (See practical 1.) If it's still not appearing, press the Settings icon in MobaXterm, then go to the SSH tab, then ensure the "Automatically switch sidebar view to show the graphical SFTP browser" is ticked. Restart MobaXterm if you change this setting. Alternatively, feel free to ask for help.

You can simply drag-n-drop files from from the CSF by dragging them from this panel in the MobaXterm window, to your PC desktop (or into a folder of your choice in the Windows explorer). Give it a go - try to transfer your `slurm-123456.out` file. You will need to navigate to the CSF folder where

the file is – training then RCSF then examples.

- **Windows users (option 2):** If on the training PCs (on-campus classroom based), run WinSCP from the Start Menu (> All programs). This is another graphical drag-n-drop file transfer program.


If using your own laptop, you can download this for free (see slides for the link and instructions.)

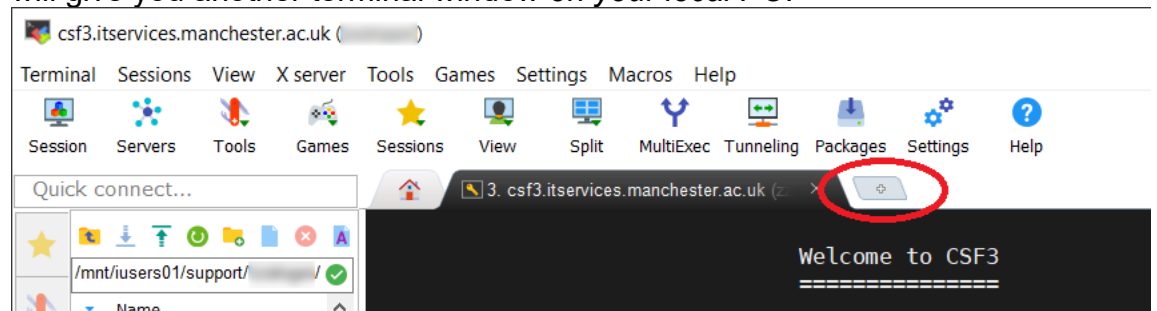
Follow the instructions at:

<https://ri.itsservices.manchester.ac.uk/csf3/filesystems/file-transfer/windows/#WinSCP>

to first connect WinSCP to the CSF then drag your `slurm-123456.out` file from the right-hand pane (the CSF) to the left-hand pane (your PC)

- **Windows users (option 3 - Advanced):** Use the `scp` command to do a linux style transfer from the CSF to your PC as follows:

First, open a new tab in MobaXTerm by pressing the small  symbol just next to the black tab you've already got open and logged in to the CSF. This will give you another terminal window *on your local PC*.



In the new tab run `ls` to *list* the files in the current directory. Now move to a folder on *your PC*:

`cd MyDocuments` (if that doesn't work try `cd /drives/p` on the training PCs or University laptops)

(`cd` is the Linux command for **change directory**).

Run `ls` again to list the files.

Now transfer your job output file *from* the CSF to your PC using:

```
scp username@csf3.itsservices.manchester.ac.uk:~/training/RCSF/examples/slurm-123456.out .
```

(notice the space then full stop '.' at the end of the line)

Check the file is there on your PC/laptop:

```
ls slurm-123456.out
```

- **Linux and MacOS users:** Open a new shell/terminal **on your PC**. DO NOT LOGIN TO THE CSF IN THIS NEW TERMINAL. Instead, run the `scp` command in the new terminal to “secure copy” (transfer) the file *from* the CSF *to* your PC/laptop, by running the command:

```
scp username@csf3.itservices.manchester.ac.uk:~/training/RCSF/examples/slurm-123456.out .
```

(notice the space then full stop ‘.’ at the end of the line)

(replace `slurm-123456.out` with whatever your output file is called, replace `username` with your central IT username and enter your **central IT password** when asked). Note: there is a **space then dot at the end of the above line**. This is important – don’t forget the `.` (it means the `slurm-123456.out` will be copied into your *current* directory on your PC.)

Upload a file to the CSF

- **Everyone:** You should now have transferred your output file *from* the CSF to your PC/laptop. You should be able to view on your PC/laptop using your preferred methods (e.g., MS notepad, VSCode, some other editor.)

Rename the file on your PC/laptop to be called `myresults.txt`

Now upload it back to the CSF. This should essentially be a case of doing the reverse of what you did for the download.

- **Windows users:** use the MobaXterm or Winscp drag and drop as before. If you tried option 3 the advanced scp then follow the Linux and MacOS instructions below:
- **Linux and MacOS Users:** Run this command in the terminal on your PC (not the one connected to the CSF):

```
scp myresults.txt username@csf3.itservices.manchester.ac.uk:~/training/RCSF/examples/
```

(replace `username` with your central IT username and enter your **central IT password** when asked). This will copy the file from your PC/laptop into the training course examples directory on the CSF. Once the file has transferred, check it is there on the CSF:

```
cd ~/training/RCSF/examples/  
gedit myresults.txt
```

If the file is not found, it might be in your CSF “home” directory. Let’s check:

```
cd  
ls myresults.txt
```

(Remember, ‘cd’ on its own takes you to your CSF “home” directory)

Is it there? If so, move it to the exercise folder:

```
mv myresults.txt ~/training/RCSF/examples/  
cd ~/training/RCSF/examples/  
ls myresults.txt
```

IF YOU CANNOT FIND THE results.txt FILE, PLEASE ASK FOR HELP NOW.