Practical 3 - iCSF Exercise

Overview

- Load and Run Rstudio
- Logout of the iCSF

Note

- On the iCSF the Linux man command shows manual pages for a command, e.g. enter `man ssh` to see the manual pages for ssh (use space for next page,q to quit)
- On the iCSF the up and down arrows can be used to scroll through previously entered commands. Press tab while entering a command or filename to auto-complete it (this saves a lot of typing – very handy!)
- It is usually possible to paste into a terminal window, e.g. by using the middle mouse button (sometimes the right mouse button).

1. Setup and run Rstudio interactively on the iCSF:

- Open the iCSF terminal window via X2go (it should be minimised at the bottom)
- We'll use R/Rstudio for this example. At the prompt type the followings commands to load the software:

```
[username@incline31 ~]$ module load apps/gcc/R/3.4.2
[username@incline31 ~]$ module load apps/binapps/rstudio/0.98.1103-any-r
# Please note later versions are available.
```

- Now start Rstudio by typing:

```
[username@incline31 ~]$ rstudio &
```

- You should have a Rstudio GUI – Load the `ex1.R` file from the previous practical into Rstudio (**File >> Open File**) and select the **Source** button to run the file. It won't do very much apart from set up a table of data and print it.
- Type the following line in the Console window (usually the lower-left window):

```
barplot(t)
```

- You should have a graph drawn in a new window.

- Add the above command in to the ex1.R source window (top-left window) and **select the source button** again to rerun the script (the graph will change – it uses random numbers each time you run it. Want to know what that was all about? See the R examples page:
  http://www.rexamples.com/6/Plotting%20a%20uniform%20distribution)

- **Save** the source file – press `Ctrl+s` or hit the disk icon.

- Quit Rstudio by running the following command:

```
quit()
Save workspace image to ~/.RData? [y/n/c]: n Type n and press enter
```

> **PLEASE NOTE:** In later versions of R and Rstudio there is an incompatibility between some libraries used by Rstudio and X2Go rendering. A workaround is to start rstudio from terminal by typing:

```
QMLSCENE_DEVICE=softwarecontext rstudio
```

Next, once Rstudio starts, go to Tools > Global options > General > Advance Tab

choose as rendering engine software and click OK. After this change, you will be able to start Rstudio from the terminal or the GUI menu as expected.

2. Logout of the iCSF

- Enter one of the following commands to logout of the iCSF:

```
[username@incline31 ~]$ logout
```
or
```
[username@incline31 ~]$ exit
```

(if it appears to freeze, press Ctrl+C. You should be returned to the prompt at your local computer).