

Connecting to Grace and using Matlab

Prior to using Grace you will need to register for an account. This can be done from the link below. We aim to setup all new accounts within 2 working days.

You will receive a confirmation email which will detail how to use Grace once your account has been created.

This guide assumes you are attempting to connect to Grace using Windows 7.

Apply for Grace HPC account

Prerequisites

Xming or Hummingbird Exceed will need to be installed if you wish to use Matlab in a Xinteractive fashion. Xming is installed on all campus computers by default. For the remainder of this document we assume that you are using Xming.

If you require a copy for personal use, it can be downloaded from the following link free of charge.

http://sourceforge.net/projects/xming/

PuTTY also needs to be installed on your PC. This is installed on all campus PC's by default. It will need to be configured as discussed further on in this document.

If you require a copy for personal use, it can be downloaded from the following link free of charge.

http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html



Getting Started

Starting an Xinteractive Matlab session on Grace

An Xinteractive session is simply a session with a graphical user interface (GUI). Operating in this mode will mimic having Matlab installed on your PC.

Further information on Job types, can be found on the following page

Launching Xming

Image 1



1. Select the Windows Orb button



- 2. Navigate to the UEA Network Applications folder
- 3. Click on the Xming icon [Image 1]
- 4. Xming is now running



Xming will minimize itself to the system tray.



Launching Putty

Image 2



- 1. Select the Windows orb button
- 2. Navigate to "UEA Network applications"
- 3. Select "SSH Login (Putty)" [Image 2]

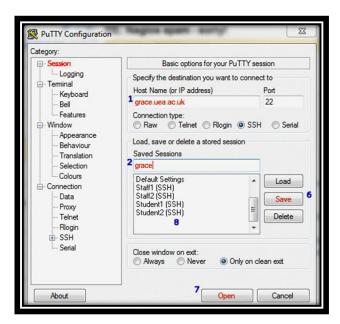


The first time you use Putty, you will have to configure and Save a session. Subsequent sessions can then utilize the stored session. Thus configuration is only done once. A Putty configuration document can be found here [Link]



Configuring Putty

Image 3



- 1. Enter the Host Name [Image 3]
- 2. Enter the Session Name [Image 3]

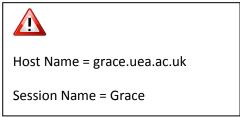
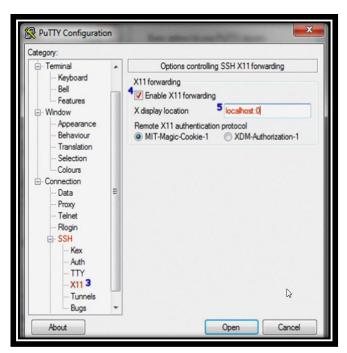


Image 4



- 1. Expand the "SSH" menu and
- 2. Select "X11" [Image 4/Number 3]
- 3. Tick "Enable X11 forwarding"
- 4. Type "localhost:0"
- 5. Scroll up and select "Session"
- 6. Click "Save"
- 7.Click "Open" to start a Grace session



When using Putty for subsequent sessions you can double click on the previously saved session.
Which we created above "Grace"



- 1. You should now see something very similar to Image 4
- 2. Note that your UEA username has already been piped into putty for you
- 3. Enter your password at the prompt and then hit "Enter"

Image 4

```
Using username "ynyl2fgu".

Using GSSAPI service principal name "host/grace.uea.ac.uk".

Using keyboard-interactive authentication.

Enter UEA Password:
```

4. Once you have successfully logged in you should see a similar representation to Image 5



Cursor blinking is disabled at the password prompt so the cursor will not blink as you type.



Image 5

```
Using username "ynyl2fgu".
Using GSSAPI service principal name "host/grace.uea.ac.uk".
Using keyboard-interactive authentication.
Enter UEA Password:
Last login: Wed Sep 19 16:17:49 2012 from 139.222.121.203
[yny12fgu@login00 ~]$ []
```

5. At the prompt type "Xinteractive" [Image 6]

Image 6

```
Using username "ynyl2fgu".

Using GSSAPI service principal name "host/grace.uea.ac.uk".

Using keyboard-interactive authentication.

Enter UEA Password:

Last login: Wed Sep 19 16:17:49 2012 from 139.222.121.203

[ynyl2fgu@login00 ~]$ Xinteractive

Job <1390244> is submitted to queue <interactive>.

<<ssh X11 forwarding job>>

<<Waiting for dispatch ...>>

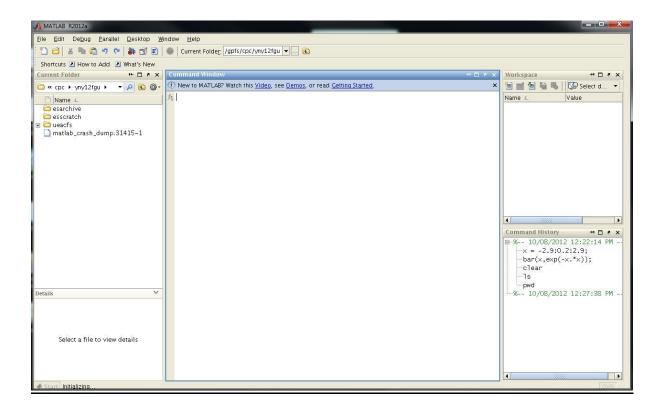
Warning: Permanently added '139.222.145.107' (RSA) to the list of known hosts.

<<Starting on cn134>>
[ynyl2fgu@cn134 ~]$
```

- 6. At the prompt type "module add matlab/2012a"
- 7. Once the above has completed enter "matlab"
- 8. You should now have the familiar Stata GUI in front of you [Image 7]



Image 7





It is possible to automatically add the matlab/2012a module in so that you don't have to type "module add matlab/2012a"

Please see the following guide on editing your .bashrc file <Insert Link>