

XX10190 — Getting Started

James H. Davenport (J.H.Davenport@bath.ac.uk)

November 18, 2010

Abstract

MatLab is on the machines in 2E 1.14, and otherwise on a central server farm known collectively as *gigaterms*.

1 In 2E 1.14

1. Go up to a PC, make sure it (both PC and monitor) is turned on, and press Control/Alt/Delete (i.e. hold down the CTRL and ALT keys, and press DEL) — commonly known as the “three-fingered salture”.
2. When prompted, enter your user name and password. When this is accepted, you are logged onto *this computer*.
- (*) If you want to change your password, start a browser (by clicking the Internet Explorer icon). This should give you the University’s **internal**, i.e. useful, home page (if you get the “shop front” version, click “campus home” on the top left). Click **Computing Services**, your **account** (you may need to scroll down), and then **change your password**. This asks you to log in with the **old** password, and you can then set a new one.
3. Click **Start** (actually the funny multi-coloured globe, generally on the bottom left), then **All Programs**.
4. Find **MatLab**, to do which you may have to scroll down.
5. Click on this, and it will unfold to show two subitems **R2010b** and **MatLab R2010b**, the second one preceded by the MatLab logo (a blue and red triangular object). Click on this second one.

2 Logging On To Gigaterms

1. Go up to a PC (e.g. in the Library), make sure it (both PC and monitor) is turned on, and press Control/Alt/Delete (i.e. hold down the CTRL and ALT keys, and press DEL) — commonly known as the “three-fingered salture”.
2. When prompted, enter your user name and password. When this is accepted, you are logged onto *this computer*. Password changing is as (*) above.
3. Click **Start** (actually the funny multi-coloured globe, generally on the bottom left), then **All Programs**, then **More Applications**, then **Gigaterms**. This will ask you for your user name and password. You are now connected to the computer(s) called **gigaterms**.
4. When you have finished with **gigaterms**, do **Start**, then **Log Off**. Note the need to log off twice. You aren’t safely logged off until you see the screen offering you Control/Alt/Delete.

3 Once on Gigaterms

5. You have a screen looking just as before, except that there is a tab at the top marked “gigaterms”. **This is what tells you you are on gigaterms:** otherwise it is very hard to tell.
6. At this point you *may* want to start a browser, e.g. to access Moodle. It is generally better to wait until now, so that the browser is also running on gigaterms.
7. Click **Start**, then **Programs**, then **MATLAB** then **R2010b**, then **MATLAB R2010b**.
8. You are now in MatLab, with a screen rather like Chapman, Figure 1.2 (p. 6), except that the command history is in a different place.

You may wish, in your own time rather than the formal labs, to run some of the demos that MatLab offers.

To leave gigaterms, do **Start**, then **Log Off**. You are then ready to perform step 4.

4 To create a MatLab script

9. Click **File**, then **New**, then **Blank M-file**. When you have entered the details you want in the editor, do **file** and **Save As**. The default will probably be to place it in **dos** (if you look closely you’ll see that it’s **dos** on **H:**), see item 12. However, you probably don’t want all your files from all your courses in the same place, so I suggest you create an **XX10190** folder (with the button that looks like a gleaming new folder) and place the file in there. If you are using several folders, you should check that the “current folder” item (top centre of the main MatLab window) is correctly set. MatLab tries to get this right, and remember it, which is generally good, but frustrating when the guesses go wrong, so always check this.
10. When you want to run it, type the name in the command window. **Note** that if you get the case wrong, e.g. ‘s’ rather than ‘S’, MatLab will warn you, and tell you that this will become an error in the future.

5 To create a MatLab function file

11. Click **File**, then **New**, then **function M-file**. Note that it gives you a nice template to fill in the output arguments, the name of the function (which *really should* be the name of the file, and also the name in the one-line comment on the next line), and of the input arguments. Note that, if you change the name of the function here, the “save as” dialogue later will prompt you with the same name. **It is a good idea to agree!** Again, don’t forget to get the case right, and make sure to put it in the appropriate folder.

6 Where are my files?

12. In general, they are *not* stored on the computer you are using. This is a **good thing** as you can’t guarantee to use that computer again, or that the next person won’t mess with them. Instead, the University maintains central file servers (that’s what **H:** before **dos** means), to which *all* such computers connect when you log in.

Later on, we can talk about such things as accessing them from home computers, etc.

7 Common pitfalls

MatLab 2007a This is the version that you can possibly get by bypassing the `gigaterms` step, and going straight to MatLab from step 2. It is subtly different from the 2010b version we are using, and you **will** be caught out at some stage. It's also much slower to launch!

MatLab 2009b This is the version that you get by clicking the wrong version in step 7. Again, it is subtly different from the 2010b version we are using, and you **will** be caught out at some stage.

MatLab 2010a This is the “student version”, that you can get from http://www.mathworks.co.uk/academia/student_version/ for \$US89. I haven't tried it, and don't know what the incompatibilities are with 2010b: there certainly are some.

8 SunRay

The SunRay machines are the “thin clients” you see, e.g. in the Sports Training Village, 2West level 1, Library and numerous foyers. They have been updated¹ to allow direct access to `gigaterms`: it's the second menu item, known as “Advanced Windows Destop”. Since you are connecting directly there, logging out of `gigaterms` will log you out completely *if* you are using this route. Given there are different routes into `gigaterms`, I recommend that you *always* check that you are completely logged out.

9 Home Working

If you are not on ResNet, I suggest you start with the section on “home working” on the Computing Service web pages.

PC You can access `gigaterms` via the following route: “start” → “all programs” → “accessories” → “remote desktop”, then connect to `gigaterms.campus.bath.ac.uk`. Note that you will have to quote your userid in the format `CAMPUS\spqr20`.

Linux You should be able to use SSH to connect to `lcpu.bath.ac.uk`, which is a family of Linux boxes. Your userid here is just of the `spqr20` format. These machines are currently running 2009a, but an upgrade to 2010b is in the works. The Unix implementation of MatLab uses X windows.

Macintosh “snow leopard” and “leopard” have a built-in implementation of X-windows, so use the Linux instructions. *Alternatively*, and probably easier, there is a Macintosh remote desktop client at www.microsoft.com/mac/remote-desktop-client — it just downloads and runs. Some colleague *shwo have* tried it speak highly of it.

¹23.10.2010.