

CS370

How to get matlab running on edlab machines

Manjunath Narayana

1/26/2011

1 In the Edlab

First know your username and password for using the edlab machines. Talk to the TA or email CSCF in Computer Science if you are not sure. You can work in the edlab only when your TA is present there. The instructions in this section are for using matlab in edlab. For remote access to edlab machines, look at section 2.

1.1 Linux or Mac

Log into one of the Linux or Mac machines in the edlab.

The full path the Matlab executable on edlab machines is:

```
/exp/comm/matlab/bin/matlab
```

Open a terminal on any Linux or Mac machine in the edlab and type the above command exactly. Matlab should open up along with a GUI interface and a command window.

The standard matlab command above opens matlab in its full GUI environment. You should see many subwindows open when you use the above command. The most important window is the command window. This is where you run matlab commands and see output. Other windows are folder view, Workspace window, and Command history.

Most of the work we do in matlab will be from the command window. You can either type commands one by one or put a sequence of commands in a file with .m extension and run the file as a script in the command window. To run a file as a script, simply type the file name in the command window. Note that running the full matlab environment takes up more resources on the machine. If you prefer to run only the command window in matlab, use the *'-nojvm'* option with the matlab command as below. This will open just the command window on your terminal.

```
/exp/comm/matlab/bin/matlab -nojvm
```

Try both commands and see how they are different.

2 Remote access to edlab machines

Edlab will be open for CS370 students only during the TA's office hours. You can, however, access the edlab machines remotely using ssh. Look at the edlab webpage <http://www-edlab.cs.umass.edu> for details about the machine names.

2.1 Linux or Mac

If you are using a Linux or Mac machine, open a terminal and ssh to the edlab machine. For instance, to ssh to elnux3 on edlab, use the following command.

```
ssh -Y username@elnux3.cs.umass.edu
```

Enter your password and you should then be able to access matlab remotely using the same commands as given in section 1.

2.2 Windows

To ssh to the edlab machines, you need an ssh client installed on your windows machine (like putty). This will allow you to connect to the edlab machines using the ssh command above. However, to display images in matlab, you will need to also have an X server (like Cygwin) installed and running on your windows machine.

2.3 Note about remote access

Note that when you access the machine remotely, running the full matlab environment might take a very long time to display and be slow to respond to commands. It is advisable to run the `-nojvm` option and use matlab in command-line mode when accessing matlab remotely.