

How to install the development tools and build ioquake at home on GNU/Linux

- these instructions will hopefully show you how to install enough packages on your machine at home
 - so that you can build the ioquake tarball we are using in the coursework

- these instructions assume
 - you have a debian based installation (includes Mint or Ubuntu)
 - you can trouble shoot a few minor differences between these notes and your system

- if you cannot get ioquake working at home, please use the games development lab J208
 - as these have been tailored your course

How to install the development tools and build ioquake at home on GNU/Linux

- firstly we need to install a few packages, so open up a command tool and type:

```
$ sudo apt-get install emacs gdb gcc libsdl-dev libopenal-dev python
```

- now copy your tarball into \$HOME/Sandpit
- if you have internet access you could fetch a copy via:
 - warning these commands will delete a previous ioquake-latest
-

```
$ cd $HOME
$ cd Sandpit
$ wget http://floppsie.comp.glam.ac.uk/download/c/ioquake-20161025.tar.gz
$ tar xzf ioquake-20161025.tar.gz
$ rm -rf ioquake-latest
$ mv ioquake-20161025 ioquake-latest
```

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- now we need to compile ioquake, so:

```
$ cd $HOME/Sandpit
$ cd ioquake-latest/ioquake3
$ ./compilequake
```

- do not run ioquake yet, as we need to install the textures
 - we will do this by installing the next two packages
 - you need to play `swquake` at least once to configure the textures
 - so keep following these instructions

How to install swquake at home on GNU/Linux

- when at University connected to the wired network (say in the lab J208) perform the following:

```
$ cd $HOME/Desktop  
$ wget http://mcgreg.comp.glam.ac.uk/debian/dists/wheezy/main/binary-amd64/quake3-hires  
$ wget http://mcgreg.comp.glam.ac.uk/debian/dists/wheezy/main/binary-amd64/swquake3_1.0
```

- now copy these files from the desktop onto your USB pendrive

How to install swquake at home on GNU/Linux

- at home boot GNU/Linux
- plug in the USB pendrive
- copy these two files onto your desktop
- now enter the following commands

```
$ cd $HOME/Desktop  
$ sudo dpkg -i quake3-hires_1.0.0-0.0_amd64.deb  
$ sudo dpkg -i swquake3_1.0.0-0.0_amd64.deb
```

- these commands install both packages, the order is important!
 - as there is a dependancy between swquake and quake3-hires
 - (the installer will complain if you switch the order)

How to install swquake at home on GNU/Linux

- at this point you should be able to see the swquake icon under the applications menu
 - try double clicking, it should run ioquake full screen 1080p and all the high resolution textures should be visible
 - running `swquake` also has a side effect of configuring your `$HOME/.q3a/baseq3` directory to include links to the textures

- you should be able to return to your coursework ioquake and run it

- so

```
$ cd Sandpit/ioquake-latest/ioquake3
$ ./runquake
```