

## 1 The DoC Labs

The Dept of Computing (DoC) labs are in the Huxley building on level 2 — the Queens Gate street level, one level down from the main walkway. We have approximately 300 powerful lab PCs for you to use. Your Lab Organisers will tell you who should use the labs and when.

The labs are behind swipe-card security doors, which will only allow authorised students and staff to enter. As you walk through the security doors in the level 2 foyer, the main L-shaped lab (room 219) is immediately on your right, behind another swipe-card reader, and the other labs (202, 206 and 210) are through it — you should find a map in your starter pack showing the layout of the level 2 computing labs.

## 2 The lab computers

Every computer has a name — like ‘ash04’, ‘ray17’ etc. Please get into the habit of making a mental note of the name of the machine you’re using - and tell us the hostname whenever you need to report a problem. All machines in the labs run **Ubuntu 22.04** Linux, or **Windows 10**, depending on what you want to do. Most programming exercises are done using Linux.

The main lab contains about 130 desktop PCs. To the **right** are three meeting rooms: 219a, 219b and 219c. Just beyond these meeting rooms, you will find two [multi-functional printers](#) with another just around the corner.

You will also find three rooms at the back of the main lab: on the left, room 202 contains 44 desktop PCs, straight ahead room 206 contains 38 desktop PCs as well as 6 Apple Macintoshes used for project work, and to the right, room 210 contains around 40 desktop PCs, intended mainly for quiet project work - and occasionally booked for tutorials. The lab machines in 202 are dual boot, running both Ubuntu Linux and Windows 10. The lab machines in the other labs run Ubuntu Linux natively: a subset of these computers have a Windows 10 Virtual Machine if you need it.

There are two other lab rooms along the corridor: 225 contains forty desktop PCs, and 221 contains a small number of desktop PCs and lots of space for laptops.

## 3 Getting a lab machine into Linux

Basically, sit down at any vacant lab machine, and if the screen is blank simply move the mouse a bit or press the Shift key. If your chosen machine happens to be running Windows, please read the next couple of sections to find out how to switch into Linux.

Note: If someone has screen locked that machine, please **do not reboot it**, on Linux after 15 minutes, locked session should be automatically logged-out. You can report a machine that is locked longer than that to CSG if you prefer. Please report problems with machines (including the name of the PC) to the CSG helpdesk in room 305 / 306, Huxley Building — or email [doc-help@imperial.ac.uk](mailto:doc-help@imperial.ac.uk). Generally, you should only reboot a crashed machine, a powered off machine, or an unused dual-boot machine to get to the other operating system.

## 4 Main Lab (room 219): Windows 10 Virtual Machine

The **Rays** and **Vertexes** in the main lab run Linux on the raw hardware and come with a Windows virtual machine (VM). If you want Windows then you login into Linux first, start a terminal window and then you can start and stop the Windows VM as follows:

- **winvm start** will start the Windows VM;
- **winvm stop** will shut down the Windows VM;
- **winvm status** will return information on the Windows VM’s current state.

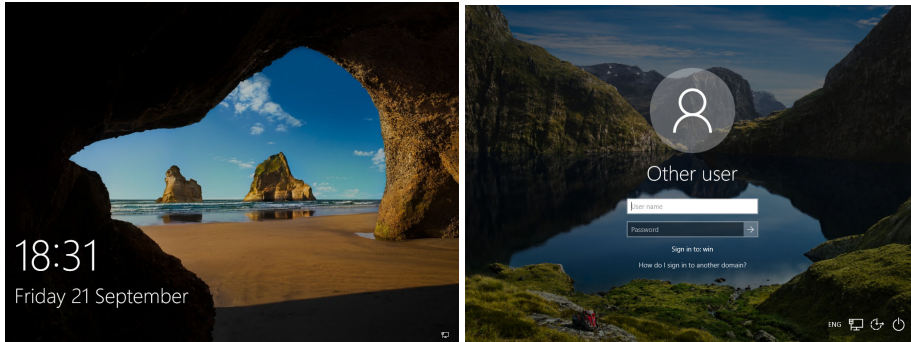
The Windows VM will appear in a separate window. Please note: use the right-hand **Ctrl+Delete** keys to simulate **Ctrl+Alt+Delete**. Please also remember to shut down the Windows VM before logging out of a Linux session. So in the main lab, every machine should always be running Linux by default, so the only reason to reboot one is if it’s switched off.

## 5 Back Lab 202: Switching Operating System

The **Texels** in Huxley 202 are dual boot. If you want to switch operating system you'll need to reboot the machine and choose the desired operating system from the Grub boot menu (the whole reboot should take a minute or two). Alternatively, of course, if the lab is not crowded, you could try to find a free machine that is already running your desired operating system!

## 6 Logging into Windows 10 in DoC

DoC Windows PCs (and VMs) always use your College username, and are supposed to also use your College password (but sometimes this fails). Sit down at any Windows computer (see the above discussion for how to switch to Windows) showing the left hand screen:



After pressing Ctrl-Alt-Delete you should see the right hand screen above. To log in:

1. Click in the user name box and type your user name (shown at the top of this guide)
2. Click in the password box and type in your College password, then hit the return key.
3. If that does not work, then please come to the CSG helpdesk in room 305 / 06, Huxley Building, and ask us to reset your DoC Windows password.