Network configuration

- login into GNU/Linux and open up a terminal
- the network configuration diagram given in at the end of the lecture is out of date
  - [deliberately done for pedagogical reasons]
- the task today is to create an up to date version of the diagram using command line tools

Network configuration

- read the manual page for `ping`
- use it to see if the IP address `193.63.129.1` is receiving packets
- read the manual page for `nslookup`
  - use `nslookup` to determine the FQDN for `193.63.129.1`
- now ssh to mcgreg
- read the manual for `traceroute`
- write down the route packets take from your local machine to `193.63.129.1`

Network configuration

- find out the IP address of your current machine
  - hint: use the command line program `hostname` and `nslookup`
- to which IP network class is your lab machine connected?
- using a landscape A4 page draw a network map showing your local machine and the network class
- using `traceroute` find out your local network gateway as it travels to `193.63.129.1`
  - your map should include all machines which packets traverse through on route to `193.63.129.1`

Network configuration

- find out the IP address of `floppsie.comp.glam.ac.uk` and add it to your diagram

- find out the machine name of `193.63.148.84` and add it to your diagram
  - add all the router IP addresses which packets traverse through between your machine and `193.63.148.84`

Network configuration

- read the manual for `nmap`
- what `nmap` command would you use to find out all client names of machines running the `ssh` server on your local subnet?
- what is the IP address of the dns server used by your client machine?
- can you find the IP address of the ntp server used on campus in the university?
- can you find the dhcp server IP address your client uses?
  - hint see if this information is visable when running `dmesg`