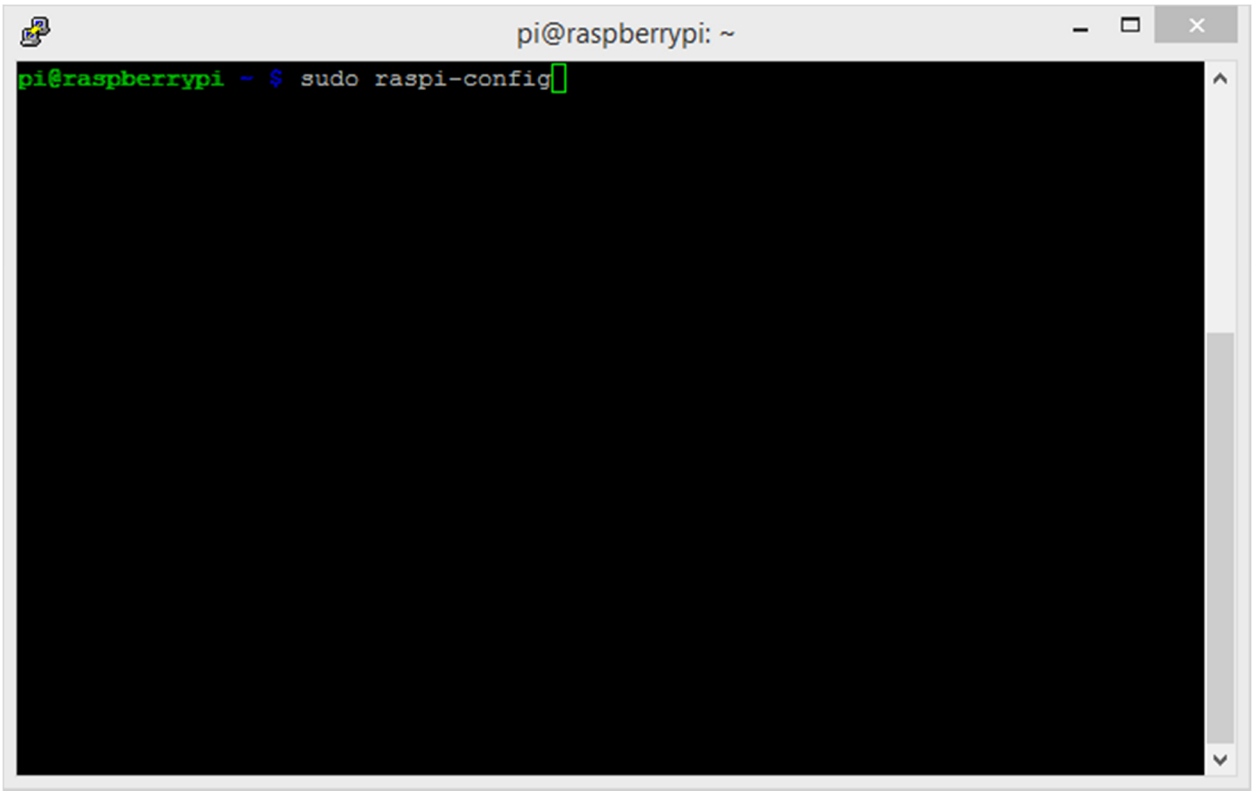
Connecting from a laptop

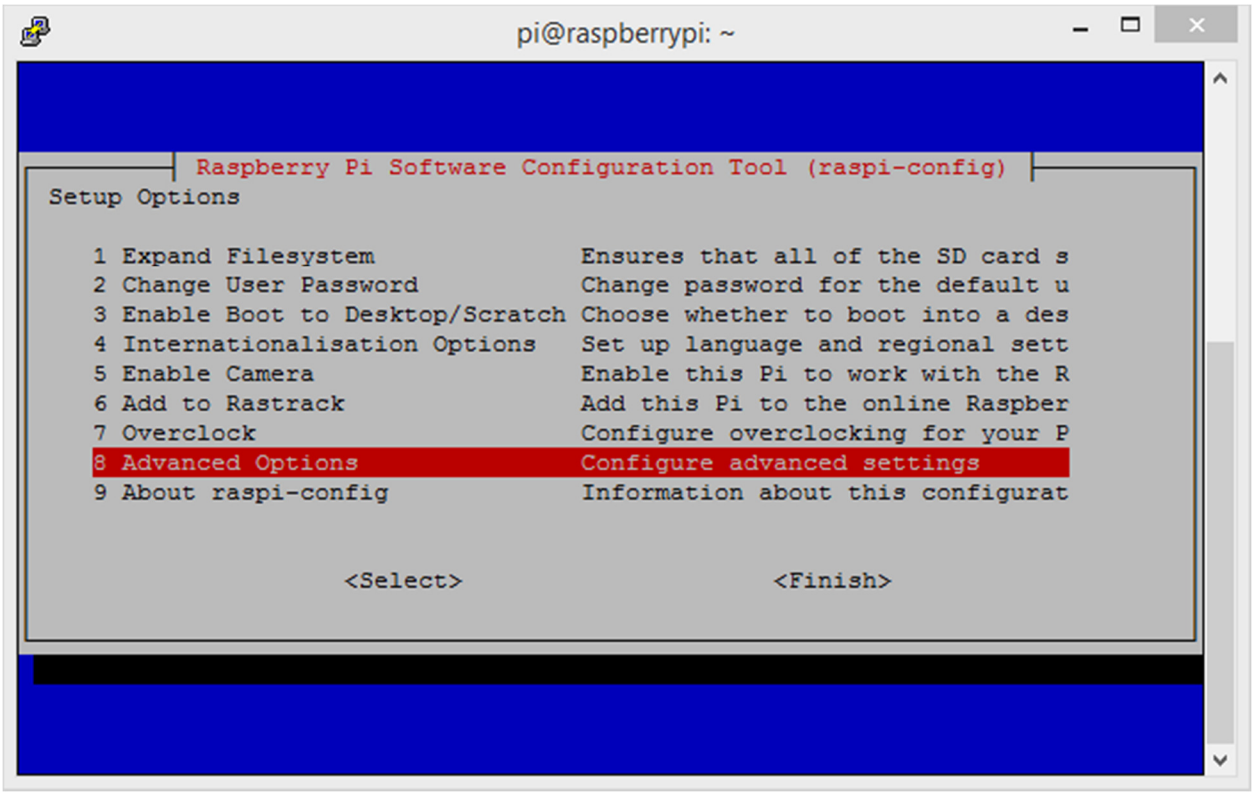
Using a wired network with PuTTY

Preparing the Raspberry Pi

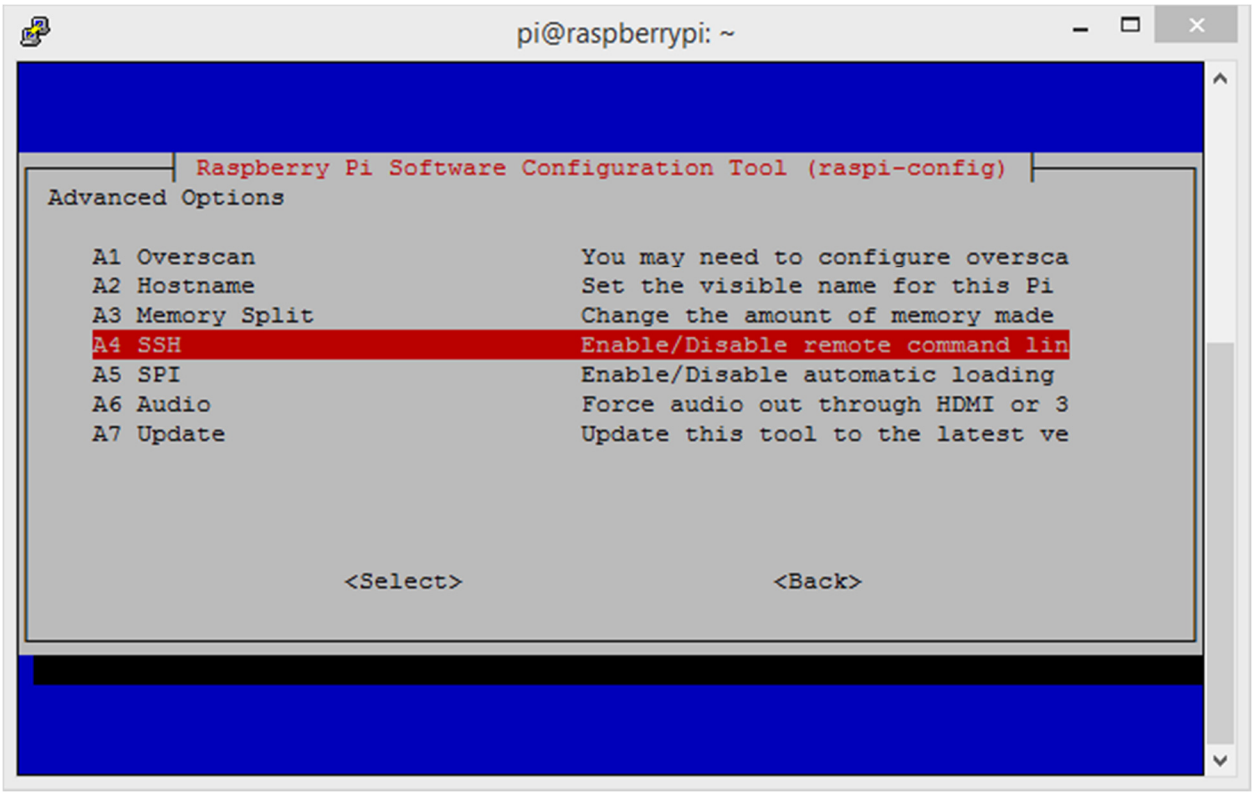
1. From a command prompt, enter “raspi-config”



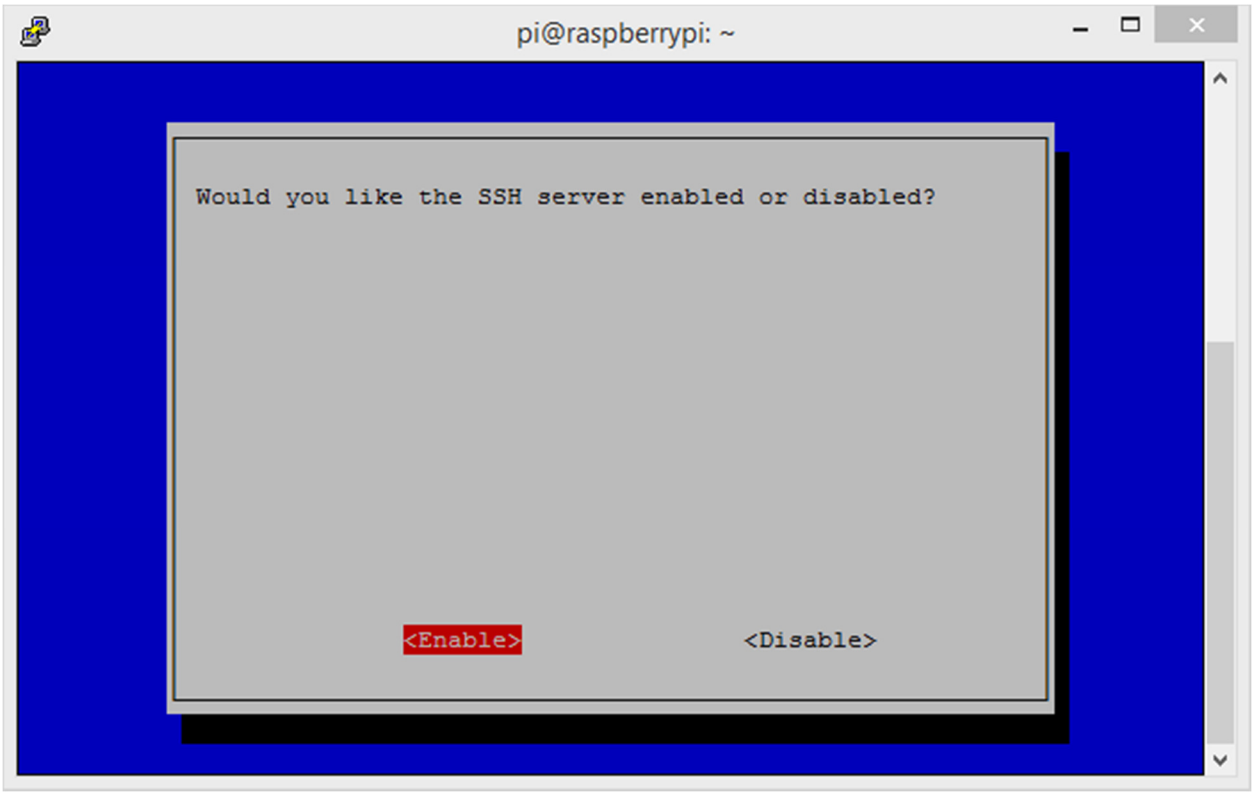
2. Select “8 Advanced Options”



3. Select “A4 SSH”



4. Select “<Enable>”



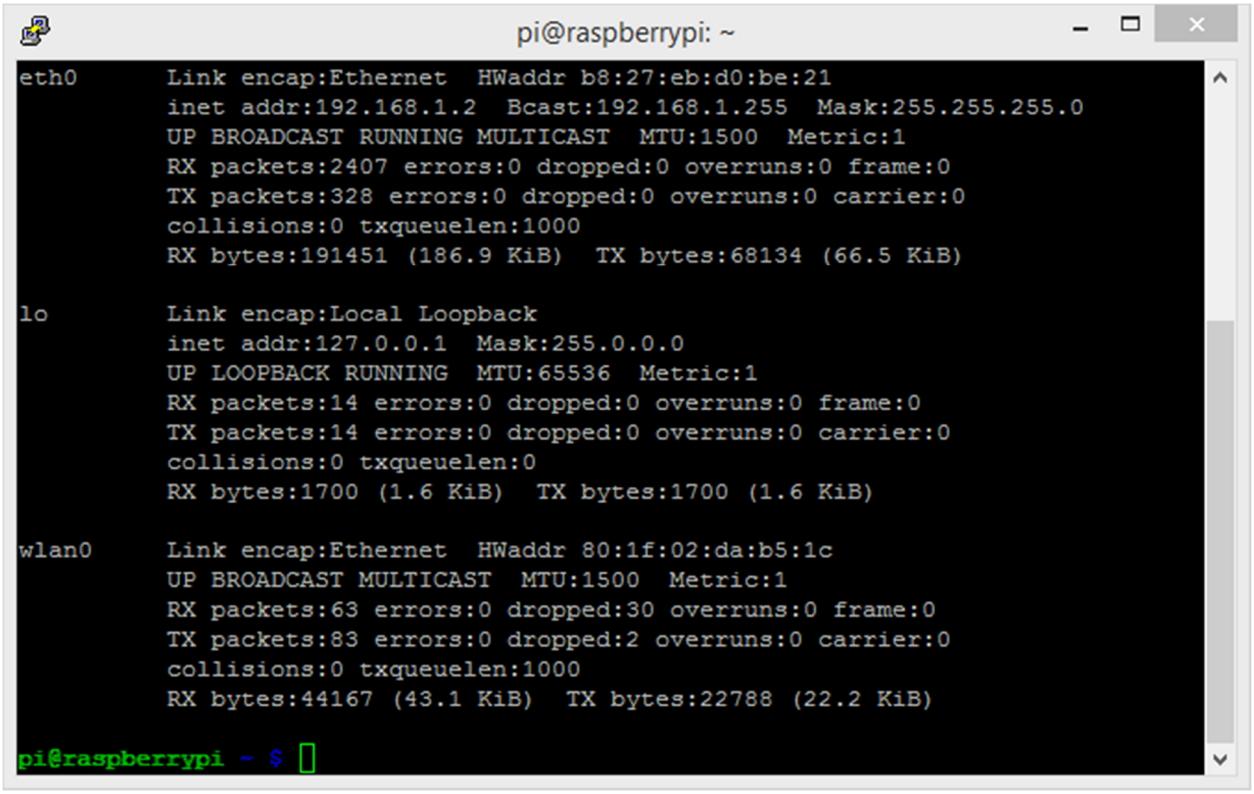
5. Select <Ok>

6. Select <Finish>

Identify the Raspberry Pi

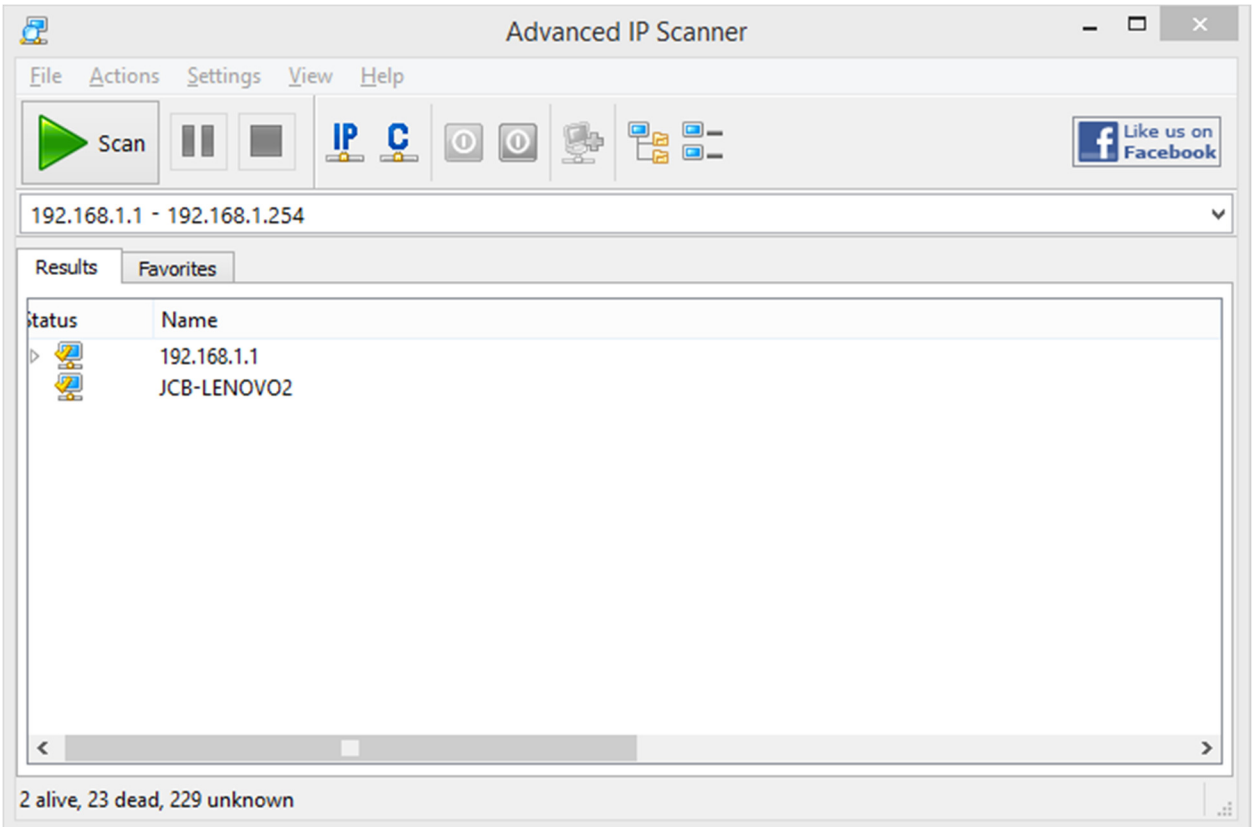
1. Connect the Raspberry Pi to a wired network

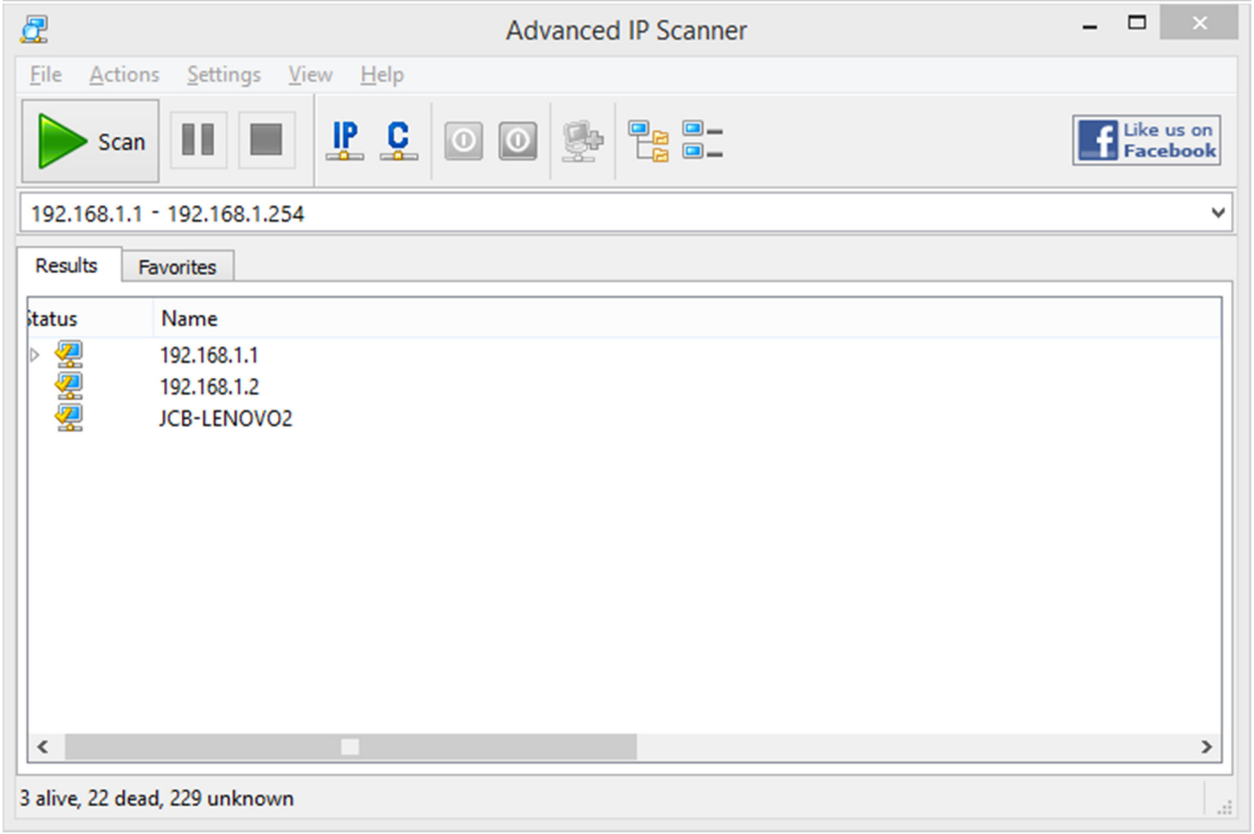
2. From a shell prompt, execute “ifconfig”. Observe the “inet addr” for the “eth0” adapter. In this example, the Raspberry Pi’s IP address is “192.168.1.2”



3. Alternatively, from your Windows laptop, run a network scanner, such as “Advanced IP Scanner”, available from http://www.advanced-ip-scanner.com/

4. Select “IP” for the current network, then “Scan”. You may want to run the scan with the Raspberry Pi disconnected and then run the scan again with the Raspberry Pi connected to identify the proper device.

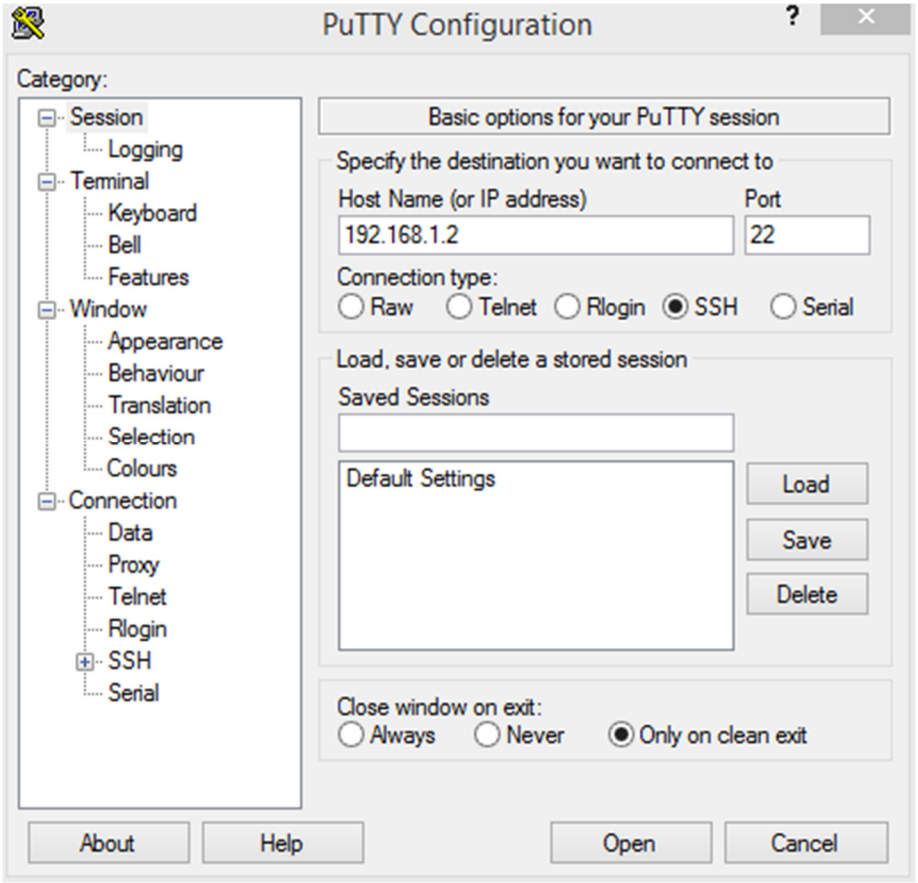

Advanced IP Scanner
File Actions Settings View Help
Scan
Like us on Facebook
192.168.1.1 - 192.168.1.254
Results Favorites
Status Name
192.168.1.1
JCB-LENOVO2
2 alive, 23 dead, 229 unknown


Advanced IP Scanner
File Actions Settings View Help
Scan
Like us on Facebook
192.168.1.1 - 192.168.1.254
Results Favorites
Status Name
192.168.1.1
192.168.1.2
JCB-LENOVO2
3 alive, 22 dead, 229 unknown

Connect using PuTTY

1. Install and start PuTTY. You can obtain the installer from http://www.chiark.greenend.org.uk/~sgtatham/putty/

2. Enter the previously identified IP address for the “Host Name (or IP Address)”and click “Open”



3. Enter the user id and password, “pi” and “raspberry” by default

Using a wireless network with MobaXterm

Configure the Raspberry Pi

1. From the Raspberry Pi desktop, start “WiFiConfig”
2. With the proper adapter selected, cSlick “Scan”
3. Double-click the desired network, “NETGEAR42” is available, as is the campus guest WiFi.
4. If needed, enter the PSK (key) for the network, “jaggedocean442” for “NETGEAR42”.
5. Click “Add”
6. Clock “Close”
7. Select the desired network”
8. Click “Connect”

Connect to the Raspberry Pi

1. Installed and start MobaXterm, available from http://mobaxterm.mobatek.net/
2. Click “Session”
3. Select “SSH”
4. Enter the Raspberry Pi’s address on the wireless network
5. Click “OK”
6. Enter login credentials
7. Try entering “lxterminal&” What happens?
8. Try entering “pcmanfm&” What happens?
9. Try entering “midori&” What happens?
10. Try entering “wpa_gui”

Advanced – Connect directly from a laptop to the Raspberry Pi

1. Configure the laptop with a fixed IP address, something like 192.168.3.2 would work well.

2. Configure the Raspberry Pi with a fixed IP address. To do that, modify the /etc/network/interfaces (make a backup first). Replace the line “iface eth0 inet dhcp” with:

   iface eth0 inet static
   address 192.168.3.3
   netmask 255.255.255.0
   network 192.168.3.0
   broadcast 192.168.3.255

3. Execute “sudo ifdown eth0”

4. Execute “sudo ifup eth0”

5. Connect the laptop to the Raspberry Pi using a “crossover” cable

6. Connect to the Raspberry Pi using PuTTY or MobaXterm