

# RASPBERRY PI USER GROUP

INTRODUCTION TO LINUX

AUGUST 16, 2014

## AGENDA

- Brief introduction to Linux
- Common command line operations
- How to connect from a laptop
- Connecting to a printer

## WHAT IS LINUX?

- The Linux kernel is an operating system
  - Much like Windows or OS X
  - Initiated by Linus Torvalds
  - Free and open source
- A Linux distribution is a collection of software based around the kernel
  - Often offering a graphical user interface
  - Often packaged with GNU tools and libraries
  - Often distributed for a specific platform

## COMMON COMMAND LINE OPERATIONS

- Starting a shell
- Getting help
  - man
- Getting around
  - pwd
  - cd
  - General file structure
- Listing files and directories
  - ls
  - ls -a
  - ls -l
- Copy files
  - cp
- Renaming and moving files and directories
  - mv
- Create a new directory
  - mkdir
- Deleting files and directories
  - rm
  - rmdir
  - rm -f



## COMMON COMMAND LINE OPERATIONS

- Creating links
  - ln
- Searching files
  - grep
  - find
- Chaining
  - |
- Redirection
  - >
  - >>
  - 2>
  - 2>&1

## COMMON COMMAND LINE OPERATIONS

- File operations
  - cat
  - more
  - touch
  - nano
  - vi
- Restricted operations
  - sudo
- Execute in background
  - &
- View the process list
  - ps
  - ps -elf
- Control processes
  - kill
  - bg
  - fg

## COMMON COMMAND LINE OPERATIONS

- Networking
  - ifconfig
  - ifup
  - ifdown
  - ping
  - traceroute
- Software Installation
  - apt-get

## NETWORKING

PRINTING