USING RASPBIAN

Getting to grips with the Raspberry Pi's official operating system

A Raspberry Pi can run many operating systems (OSes), but Raspbian is the official OS and the one most newcomers will start with.

Raspbian is a Linux operating system based on the popular Debian distribution. Fully customised for the Raspberry Pi hardware, it's usually a trouble-free experience using a Raspberry Pi with Raspbian.

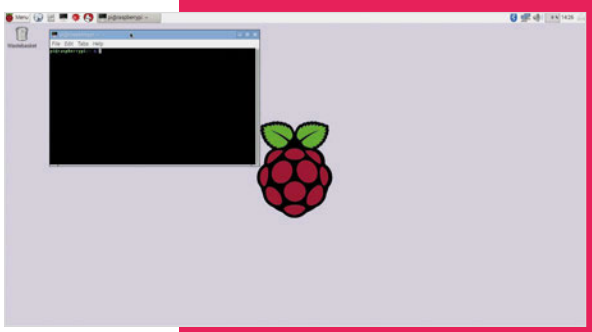
One aspect of Linux that will be new to Windows and Mac users is being able to choose from different graphical interfaces. Raspbian includes one called LXDE, which stands for 'Lightweight X11 Desktop Environment'.

This heavily modified version of LXDE enables you to use a Raspberry Pi as you would another computer. You have a Menu button, which offers access to most of the programs and apps installed. Programs open in windows, which you can switch between, minimise, maximise, and close using buttons.

Many users might be wondering why this is anything special. Well, computers didn't always have windows; instead, most users used a command-line interface and entered text commands to start programs.

It's possible to buy SD cards pre-formatted with the Raspbian software. This saves you from having to install the operating system

You'll learn how to use the terminal and control your Raspberry Pi computer using text commands



Terminal velocity

In Raspbian, you'll probably spend some time working under the hood of the desktop in a command-line environment. Next to the Menu button is the terminal, a program that enables you to enter Linux text commands. Learning how Linux works, and how to create programs that run from the command line, is part of the joy of owning a Raspberry Pi. It's a return to classic computing where you need to learn how things actually work.

Raspbian is a great environment for learning to code. Along with easy access to the command line, you get all kinds of programming environments built in: everything from MIT's Scratch to Python and Java. You even get a full working version of Mathematica, a cool maths environment that normally costs £190 to buy, with access to real-world data.

Office worker

It isn't just about programming, though. You can use your Raspberry Pi as a desktop computer, and the operating system comes with LibreOffice built in. This is a full office suite of programs, similar to Microsoft Office. Its programs include Writer (word processing), Calc (spreadsheets),