

CHOOSING YOUR DISTRIBUTION

Beginners' Guide to Linux

PART 1 Dumping your proprietary OS? **Andy Chappelle's** new series explains what choices you need to make and tasks you should perform to smooth your migration to Linux.

Linux is all about choice, and one of the earliest choices you will be called on to make concerns the most fundamental aspect of the system: the distribution. The website www.distrowatch.com which is dedicated to posting the most up-to-date news on new releases, currently lists some 130 Linux distributions in active development. While this is an awful lot, the number can be broken down into various sections. At the bottom are the projects such as *tomstribt*, a distro designed to rescue broken systems. At the other end of the scale there is *Red Hat Linux Advanced Server* which is aimed at enterprise users running large file, print and web servers. In between we have everything from firewall appliances such as *SmoothWall* to packages aimed at home and business desktop users, which is what we're looking at here.

Right, so we've narrowed the field down to the home/office sector, now it is time to decide whether we want a fully featured distribution that has a great deal of software included (a lot of which we'll probably end up ignoring) or a more stripped package intended to cover the basics, which is usually defined as email, web browsing, word processing, MP3 ripping/playback, digital photo management and games.

Want it all?

The market leaders in the 'full service' sector are Red Hat, which dominates North America; SuSE, which holds a similar position in mainland Europe; and Mandrake, which is challenging everyone all over the world. As with Microsoft's Windows OS, it is not unusual for these companies to target different markets with a range of packages; all offer at least a Personal and Professional edition of their distros. Often there is also a free version available which can be downloaded and burned to a CD or installed across the Internet which, if you have a broadband connection, makes choosing your distro a lot easier: try before



KDE Control Center can tailor the behaviour of related applications to your exact needs.

you buy! The free versions of distros typically come with no support, so if you're concerned about installation hassles (and want to support your favourite developer) you'll find a range of boxed products at online stores such as www.dabs.com and www.simply.co.uk or even in PC World. As well as support, these retail products usually come with an invaluable collection of manuals, a full set of CDs and, in most cases, a selection of stickers to decorate your PC!

Prices range from £29.99 for SuSE 8.2 Personal to £120.00 for Red Hat 9 Professional, and the latest releases have all received glowing reviews over recent months in *Linux Format* so you know that whatever you choose, you're getting quality kit. Like the prices, the facilities on offer will vary, though at the very least you can expect to get a fully featured office suite capable of opening and saving the most common formats, a full selection of graphical Internet applications, photo manipulation/management tools, file managers, media players, CD burning utilities, home/business finance packages and a collection of games. More often than not there will be more than one of these elements to choose from. The Professional versions are usually distinguished by the inclusion of fully licensed commercial software or more fully featured administration or server tools. SuSE Linux Professional, for instance, includes a copy of *MainActor*, a high-quality video editing package. All the main distro sellers include a complete list of applications included in all their packages, so visit the websites, hunt around and choose the one that suits your needs.

Some of the names to look out for include:

- The GIMP** excellent Photoshop-like image creation and editing package
- MOZILLA** Open Source offspring of the old Netscape web browser
- OPENOFFICE.ORG** extensive productivity suite featuring Word Processor, Spreadsheet, Illustration and Presentation tools.
- EVOLUTION** email/groupware client in the Outlook vein.
- XMM5** capable - and skinnable - MP3 player.

Linux Basics

What On Earth is a distro?

WHAT IS A DISTRO?

A Linux distribution, or distro, is a collection of software put together by a company or organisation. The core of this is the operating system (OS), itself a compendium of parts, that acts as a platform for the applications which we use to do things like send an email or remove 'red-eye' from a digital photo.

HOW IS THAT DIFFERENT FROM JUST AN OPERATING SYSTEM?

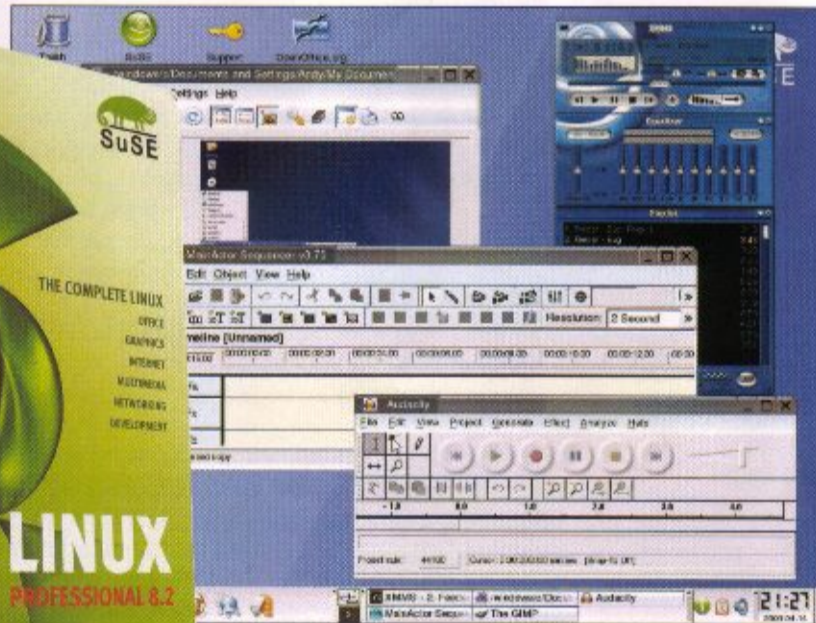
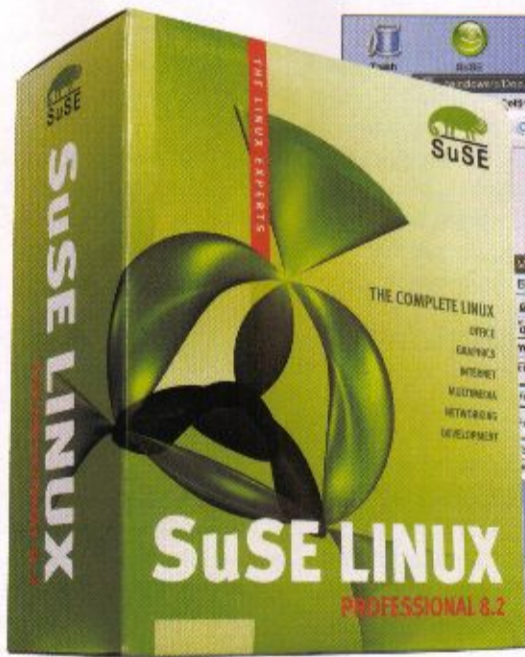
As well as containing the thing that makes a computer work - the OS - a distro includes a selection of software. In many cases this could

be upwards of 2000 applications covering everything from basic everyday uses to highly specialised jobs.

SO, ARE MICROSOFT WINDOWS AND APPLE OS-X DISTROS?

Well, sort of. While these OSes may feature integrated web browsers, movie editing software etc, the breadth of software is usually limited in both scope and functionality. The big Linux distros, however, will include applications to do almost any PC-based task you can think of, and some you probably couldn't! Some distros let you install only the components that you want.

- KDE** integrated desktop environment including office, connectivity and educational applications.
- GNOME** alternative to KDE
- TUXPAINT** happy, noisy paint package aimed at children.
- PIXIEPLUS** fantastic photo management application that can format collections of images into web pages.
- WINE** package designed to install and run SOME Windows applications.
- APACHE** industry standard web server equally at home running personal pages as it is serving up enormous corporate websites.



These are all good choices, and as you're using Linux - regardless of the company to which you give your custom - there will always be an alternative available.

Best of both worlds

While the hand-holding and simplification of Xandros, Lindows and Lycoris can be tempting, the packages available from the 'traditional' Linux sellers provide far better value for money. While each of these products will grow with your experience, the products from SuSE, Red Hat and Mandrake are updated more frequently, contain a wider selection of applications and give these others a run for their money in the usability stakes. The use of KDE or GNOME across the board also means that moving from one system to another won't trigger the (potential) culture shock of your first experience with Linux.

Read the reviews, browse the forums of distro sellers - but don't labour over your decision too much, picking up a dud is actually quite difficult - and then take the plunge!

Apart from the icons looking a bit different, SuSE is no different from Windows in terms of the desktop functionality that is available.

Want it easy?

If all this seems a little complicated, a new breed of Linux developers are endeavouring to make the process of installing and managing a Linux system foolproof, as well as forging links with hardware companies to get their products pre-installed. The three names making an impact here are Lindows, owned and run by Michael Roberts (formerly of MP3.com); Xandros, which rose from the ashes of Corel's abortive entry into the Linux market; and Lycoris. Ironically these three systems, though less 'complete' than those mentioned above, are more expensive - putting a premium on easy installation and friendliness to users of other operating systems. Lindows, for instance, can go from a bare system to completely installed in just eight minutes. But this simplicity must be balanced, in most cases, by the drastically reduced number of included applications. While Lycoris sells its Desktop/LX system for US\$29.95, this price doesn't include the companies integrated version of *OpenOffice*, for which you'll need to shell out an additional \$39.00, though you can always get the 'official' *OpenOffice* suite which costs nothing. Desktop/LX does, however, include useable selection of applications and there is an unsupported 'Community Edition' available. Lycoris also has an edition tailored toward games players featuring *WineX*, a special version of *Wine* capable of playing many Windows games.

With Lindows the situation is more serious: it comes with the bare minimum. No office suite, no calculator (!), no graphics application, to get these you'll have to join Click-'N'-Run which adds an annual charge (currently \$99) to the initial charge of US\$129 for the actual OS. This was fine because the price included unlimited access to the 'Warehouse', which included gems such as *StarOffice* and *TuxRacer*, but now Lindows has begun adding premium content, which obviously, attracts a further cost. You can, with a little bit of effort, configure Lindows to use the installation system from Debian, which is widely regarded as the best package management system around.

The situation with Xandros is a little different again, as the US\$99 Deluxe version includes *CrossOver Office*, an application which can install and run the *Microsoft Office* productivity suite, *Quicken* and other Windows software.

NEXT MONTH

Is Linux really difficult to install? We'll show you how a little preparation can make what is regarded as a notoriously difficult job into a walk through Elysian fields.

Glossary

Linux terminology

OPEN SOURCE Software which is distributed in both binary and source form. The binaries are pre-packed and ready to install while source must be compiled. The value of including the source code is that users are not limited to the capabilities of a given package, they can add or take elements away - if they have the right skills. One of the most common licenses (the rules governing what can and can't be done with a package) is the GNU General Public License (GPL). **KERNEL** The most current series is 2.4. This is the very heart of the system. **XFREE86** This is what drives the Graphical User Interface (GUI), handling the resolution and colour depth of your screen. The most recent versions include the ability to change these elements 'on the fly'. **KDE/GNOME** The two main desktop environments. Current versions are 3.1 and 2.2 respectively. The desktop sits between you and

the computer, so if you don't already have a preference, take your time and play around before you opt for one over the other. Both Red Hat and Mandrake have made efforts to make the two main desktops work in a similar fashion, while Xandros, Lindows and Lycoris are pure KDE-based distros. **RPM** The Red Hat Package Management system which is used to install, update and remove software from your PC. Mandrake, SuSE, Red Hat (obviously) and many other rely on RPM to maintain their systems. The alternative is the .deb format used by Debian. RPMs have a .rpm file extension. **DEBIAN** A free (as in speech) software distribution that encapsulates the Open Source ethos. While not the easiest thing to install, Debian is one of the most complete Linux distributions you can get and once installed, management is very simple.