



# Linux: is it the one for you?

Chris Bidmead asks why users should convert to **using Linux instead of Windows**. Plus, details on Primergy, the new server from Siemens-Nixdorf.

**M**y postbag suggests that there are some people out there who think Microsoft Windows defines computing, and they expect Linux to fit that definition. It doesn't. The problem seems to have got worse now that *The Economist*, *Forbes Magazine*, *The Sunday Times* and other pillars of the establishment have started promoting Linux as "the next Windows" or some such nonsense. This month and for a couple of months after that, I'm running a separate workshop [see page 242] for existing Windows users who want to get started with Linux. I thought I'd turn over some space in this column to the more general question: why Linux? If you're about to plunge in, or even if you're an existing Linux user who hasn't asked yourself this question yet, it's worth taking time to come up with some useful answers.

**Here are some** of my reasons. Firstly, I think Linux is a very good operating system — more robust and more versatile than Windows or Windows NT. I also appreciate the fact that it's open source (see [www.opensource.org](http://www.opensource.org)) and all that implies — robust, versatile and much more. I like the fact that it's based on the design of Unix, in many ways the ultimate (intelligent) end-user operating system, built like clockwork in a way that makes it understandable from the ground up — if you're prepared to invest the time and trouble getting to know it. That's why I use Linux, as my main production operating system in fact. Your answers may be different, but if you're installing Linux for the first time, you do need to sort out what they are before you get started.

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different versions of Windows, too (3.x, 95, 98, NT and CE) and actually these differ in essentials much more than Linux distributions. But without the comfort of costly marketing to "position" its various distributions, the wide choice of different Linuxes can be confusing to the beginner.

## PARTITION IT FOR FREE

**T**he following tip has come in from Andrew Aylett <[the.idiot@mindless.com](mailto:the.idiot@mindless.com)>, whose problem was trying to resize a FAT32 partition to make room for his new copy of Suse Linux. Fips, the traditional DOS-based partition shifter, comes with most Linux distributions but I believe it doesn't (yet) handle FAT32. I have an

alternative suggestion which could prove rather useful: get Partition Resizer from Zeleps <<http://members.xoom.com/Zeleps>>. It supports both FAT16 and FAT32! I think that it should get a little more exposure, as most people still think Partition Magic is the only way to go without just wiping everything with fdisk.

OK, this message from Andrew has literally popped up on my desktop while I'm writing this month's column, so I haven't had a chance to try it out. If you give it a go, do write in and let me know how you get on [“PCW Contacts”, p271]. The author, Zeleps, or John Lagonikas, says the software is free, but asks you to send him a postcard if you like it.

## Leaving the world of Microsoft

If you're coming to Linux from Windows, there are important differences to be on the lookout for:

### ➤ Varieties

There are a number of different free Unix-like operating systems, known as Unices. Linux is the one I get the most questions about in my email for this column. But the choice doesn't end there. Although they all use the same kernel (albeit with different release numbers), there are also several rather different Linux distributions, each with its own philosophy, file-system layout, library set and so on. There are multiple

### ➤ The GUI

Compounding this confusion is the fact that there's no "standard" graphical user interface for Linux. This has really baffled some contributors to my mailbag, who are accustomed to think of the GUI as an integral part of the operating system. Like Unix in general, Linux separates out the front-end from the core operating system and runs it more or less as just another application. Actually, the connection is even looser than this description implies, because the GUI is a "network" application — you can run the GUI on one machine and the operating system on another.

The "glue" that binds the GUI to the operating system is called "The X Window System", or just "X". You'll frequently see this referred to as "X-Windows", which is wrong. But I seem to be fighting a losing battle over this. More worrying than the misnomer is the common confusion between X and the GUI itself. They're not the same thing, which is why, although X is standard across all Linux distributions (and most Unices), the GUIs can be very different indeed.

### ➤ Installation

These days Linux is probably easier to install from scratch than Windows. But most users don't install Windows from



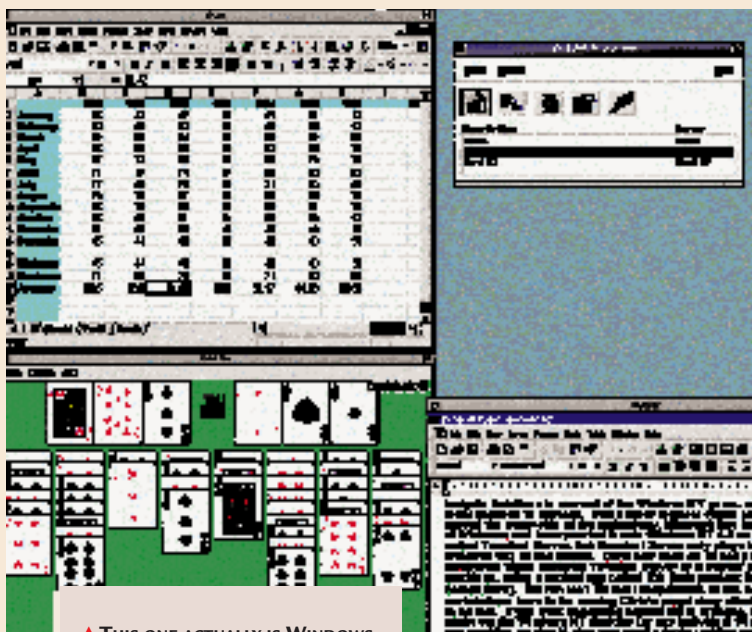
## NOW THAT'S MAGIC!

**D**aniel Power runs POW!, which distributes PowerQuest's software here in the UK. Probably its best-known package is Partition Magic, a handy way to shift around and resize your existing Windows and DOS partition to make room for other operating systems. However, the new version goes even further because it now knows how to handle Linux partitions.

I used my new Partition Magic on the Windows 95/Linux dual-boot installation on my Scenic Mobile 500 portable. As a test I tried snipping 2Mb off the Linux swap disk and adding this to the Linux ext2 partition. Setting up the layout for the new partitions took only moments. Once you're happy with the new arrangement, you apply the changes, or you can back off, with no harm done. The various careful batch processes for shifting around the data took about ten minutes. Partition Magic's graphical user interface (running under Windows 95) has always allowed you to resize and move Windows partitions

around with the tip of your mouse pointer, but now it can do the same thing with Linux and Linux swap partitions. Very impressive.

**The program comes** with several wizards for performing routine tasks. I ran one of these, called Analyze and Recommend, and it offered to optimise my hard-disk space. I was sceptical: the Mobile 500 only has a 1Gb hard disk, and the three partitions — Windows 95, Linux, and Linux swap — cram it to the limits. Yet the Wizard saw the opportunity to reduce the cluster size in the FAT partition and offered to reclaim a massive 159.5Mb. Curiously, it spoke of creating a "new



▲ THIS ONE ACTUALLY IS WINDOWS, RUNNING ON MY SCENIC 500 PORTABLE. AS YOU CAN SEE, HALF THE DRIVE BELONGS TO LINUX, AND NOW, IN ITS VERSION 4.0 MANIFESTATION, PARTITION MAGIC KNOWS HOW TO RESHAPE BOTH THE LINUX EXT2 AND LINUX SWAP PARTITIONS

logical partition" so that I could use the newly reclaimed space.

**Before committing** to this, I decided to explore the Wizard's next move. Ah, glad I did. The Wizard told me it had detected a single partition on my hard disk

and offered to help me "organise my data better". I really didn't like the sound of this. The Wizard and I didn't seem to share the same understanding of the partition table, so I decided to back off.

➤ **Conclusion:** the basic partition-moving seems fine, but I'm wary of any help from those Wizards, who don't seem to have been informed about the arrival of Linux. I'll check this out more thoroughly and report back.

scratch, because it comes with the hardware. Modern operating systems are complex: installing Linux can be complex too. And it doesn't make life easier if, like most people getting started with Linux, you choose to install Linux as an addition rather than a replacement for Windows.

**There's a very good introduction** to Linux for Windows users in the DOS-Win-to-Linux HOWTO, which you can find, for example, at <http://tsx-11.mit.edu/pub/linux/docs/HOWTO>.

### ■ Primergy finally turns on the power

Back in September I introduced you to the new Primergy server from Siemens-Nixdorf that has taken up residence on my network. I told you about my plans for this as part of the Unix/Windows integration effort I'm exploring here. As long-term readers of this column will know, since early 1996 I've been running server software called NTrigue, which allows me to bring up NT in an X Window on any of the machines on my network. Ntrigue was sold by Insignia

Solutions, and effectively packages some special multi-user fixes (called Winframe) from a company called Citrix <[www.citrix.com](http://www.citrix.com)> with some clever X11 software co-developed with the X terminal specialist, NCD <[www.ncd.com](http://www.ncd.com)>, all sitting on top of Windows NT version 3.51.

**Insignia Solutions** no longer sells NTrigue. A complicated game of musical chairs has taken place around the ownership of the technology.



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