letters

Linux and the FAT farm

Reading PCW over the last few months, I have taken issue with some of your reporting on Linux. I am the first to admit that the OS is not yet perfect and has a long way to go before it comes anywhere near Microsoft in terms of ease of use for the first-time user and product support, but I have a few points. First, a few months ago, we were told in one of the Hands On columns that Linux could not support FAT16, FAT32, NTFS or HPFS. This is quite wrong. FAT16 and FAT32 have been supported in the kernel for about a year and a half, and HPFS and NTFS are now supported. NTFS is only read-only at the moment, although it is work in progress.

Second, your review of RedHat 6.0 may have been factually correct, but I was concerned that you thought £86 was expensive for an OS that includes all you probably need to do anything you want with a computer, except games. This is compared to the full price of Microsoft 98 SE of £160.98, which is just an operating system and is frequently prone to crashing, yet in your review of it there is no mention of the fact that it is rather expensive. Admittedly, the upgrade is cheaper for Windows, but then for Linux it is only £2 from the Linux Emporium (www.polo.demon.co.uk/emporium.html, not www.redhat.com as you said in your review)

Lastly, in the September 1999 issue, we were told: 'Macmillan has just published a Linux version of Quake and Quake 2.' Quake and Quake 2 have been around ever since the games were first released by Id Software. Id ported the games to Linux because the servers ran better under Linux rather than Windows, and lots of people want to play under Linux. In fact, the Quake 3 test was released on the Mac and Linux before Windows. In addition, many other games manufacturers are porting games to Linux.

Having said that, I would take this opportunity to congratulate the magazine, and Chris Bidmead in particular, for the improving coverage of Unix and Linux.

CRISPIN FLOWERDAY
SOUTH CROYDON

SPEED DEMONS

While engaged in a conversation in my local watering hole (where I have made several good friends solely from helping fix problems on their computers) I was amazed to hear that two lads had just purchased the latest Pentium III systems for more than £1,800 each. I say amazed because having recently worked on their old ones (a reformat and clean install of Win98 and a reboot re-install of Win95) I know exactly what was on their computers. Each system was a Pentium II 233/266, with a 3.2Gb drive with between 1.6 and 2.0Gb free. The computers were only running software such as Internet, games, Encarta 99, Windows 95/98, so they were, in fact, at a resource level of 83% free.

When I asked why they needed such high power to run stuff you could run easily on less powered machines than they already had, the amazing answer was if we all did not need higher powered machines, then manufacturers would not make them.

The truth is, I think that if we did a survey on how many people had an upgrade at great cost to, say, the latest Pentium III, and did not really need one, the sales figures would show an amazing drop and manufacturers would not be so quick to bring out new technology at such an alarming rate.

The hype given to us by the manufacturers is properly understood by very few. What difference is a Pentium III going to make to Mr Average running a Pentium II? My pals have no idea what they have bought and, as far as a DVD is concerned, have no wish to use it and did not even know you can alter it to UK/US films

But that is exactly what the manufacturers want – new hype, new mugs parting with their money who just need to boast they have a Pentium III.

Dixons, I hear, is selling £200 PCs just for people who want Internet and basic computer use. Quite frankly, my two pals would have been better off by £,1600 if they had purchased one of those.

Here's to fools and technology.

MR J SHINGLER
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WHAT A MONSTER OF A SPECIAL EFFECT

Michael Hewitt's column about CGI special effects in horror films in the September issue was spot on. I am a big fan of the old Toho *Godzilla* films from the 50s, 60s and 70s, and although I did enjoy the 1998 version, it can't compare. The old films were not really horror films, they were more fantasy, and who can honestly say they don't find two men in rubber suits wrestling funny?

The 1998 film was trying to be a horror film and Michael Hewitt's comments about in-your-face effects over suspense were bang on. CGI should be used only in sci-fi films where it is needed, and sparingly at that.

NEIL THOMAS
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Mike Hewitt got it seriously wrong in his Sounding Off column in the September Issue of *PCW*. At his age, did he really expect to be a little bit frightened by the film *The Mummy*? Would the likes of Boris Karloff and Vincent Price still seem as bottom-clenchingly good today? Personally, I think not. Did Hewitt borrow a child to watch the film? My daughter, who is 12, spent 30 per cent of her time hiding behind her popcorn. She knew it wasn't real, she guessed it was computer effects, but for her and many others of her generation it happened.

Mike, you should be thankful that you found it at least 'very clever'. Me, I went with my family to be entertained, not fooled. My daughter had a great time and maybe, just maybe that was good enough me.

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FREE AND USELESS

I seem to be getting more than my fair share of 'unable to establish a connection' messages from Freeserve so as a new shareholder, can I look upon these missed hits as a useful source of future dividend income?

My modem happily calls up Freeserve, which promptly replies with a happy whistle. A tuneful dialog then commences, which checks IDs and passwords. Great! But very frequently, Freeserve responds with an 'unable to estb...' message and disconnects, whistling a happy 'next please' as the door is slammed in my poor modem's face.

Uncharitable thoughts are passing through what Bill has left of my addled brain. Does Freeserve get a cut from BT for these contacts? Is it a handy way for Freeserve to raise funds and impress prospective investing punters? As a bit-part owner of Freeserve, should I encourage increased use of this money-spinner and quietly slide off to some other ISP which has not yet cottoned on to this scam? Have they all cottoned on?

Or have I got this all wrong?

DG KINGSTON
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Clive Akass replies > We've had similar complaints about other service providers. They do indeed make money on your extra calls. Looks likes the problem will be with us until we all get always-on services like cable or ADSL.

RUNNING ON MD

'Feeling all MD inside' by Paul Smith (August 1999) was interesting, but it did contain several misleading statements.

Smith states that MP3 can 'squeeze CD tracks into about a tenth of their former selves without any loss of quality'. To anyone with any reasonable sense of hearing, this is obviously false. MP3 is a lossy compression technique and MP3 files, compressed at 128Kbits/sec to give 11:1 compression, do exhibit some distortion and loss of quality. For a simple test, try listening to a piano piece both before and after compression.

Later on, Smith again says: 'Indeed, you can record digitally end-to-end if you have a digital optical output on your sound card, so you can make perfect copies of either your CDs or your MP3s.' The MD recorder does not record uncompressed data but compresses about 5:1, using, once again, a lossy compression technique. Whenever a lossy compression method is used, some loss of quality *will* occur and a prefect copy is impossible to make. Smith's article misleads readers into believing that the quality of MP3 or MD files is higher than it actually is.

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Brian Clegg replies > You are quite right that both MD and MP3 use lossy compression. You are wrong, however, in thinking that this implies loss of perceptible quality. Actually, there is a huge amount of redundant information — sound that our imperfect ears would never hear or miss — that can be removed; it is this data that these compression algorithms are seeking to remove.

I take your point that copies won't be perfect in the literal sense but, in terms of portable MD and MP3 players and the typical music played on them, the copies are perfect enough. An audiophile with expensive equipment, listening to classical recordings, may spot the difference. The rest of us won't notice.

...letters

WHY UNIX HAS BECOME EXTRA-SENSITIVE

I couldn't agree more with Brian Clegg's comments (*PCW*, September 1999) on the importance of usability of software, and that usability should be the prime concern and driving force of software design.

Conversely, while I just get bored by arguments over which operating system is 'best', I do think Clegg is attacking Unix on the wrong grounds over its lack of 'case-blindness'. As a mature operating system, it had a lot to achieve within the 768Kb of a PDP-11/70 (a minimal system could run in 96Kb). Early Unix kernels consisted of around 10,000 lines of C code plus 1,000 lines of assembly – it couldn't afford the luxury of converting case before comparing character strings. In fact, Richie and Thompson, writing in 1978, were quite proud of the fact that Unix was developed in less than two man-years

and could run on hardware 'costing as little as $40,000'.

As for Unix now, I've no idea, but coming from that background, perhaps too many things have come to depend on that case sensitivity to be able to change it. On the other hand, perhaps its devotees simply wouldn't have it any other way...

CHRIS VENESS
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Brian Clegg replies >

I accept absolutely that Unix made sense 20 years ago, but things have moved on and it's no longer just the cognoscenti that are exposed to it, hence the argument! Thanks for writing.

WE'RE ALL ON THE UNIX CASE

I felt compelled to rise to Brian Clegg's challenge to explain what benefit case sensitivity has in the Unix operating system (*PCW*, September 1999).

The answer is buried deep in the roots of the origin of the operating system. The user interface is, uniquely, also a programming language in its own right.

This is unusual enough today, but in the 70s it was revolutionary. Can you think of one programming language that is not case-sensitive? Bear in mind the entire Unix OS works on case sensitivity, not *just* filenames. Also, remember that Unix and its user interface (running on minimal hardware) were designed to be slick and quick.

As for passwords, all it takes is someone to put the first, last or perhaps the penultimate character in their password as upper-case (or lower if all the rest is in upper) to make it easy enough to remember. And yet it is so much harder for someone to crack. If people can't actually remember to do this, how do they manage to remember to use their applications? They must have memories like goldfish.

So the benefit to humankind? Tight, robust code which works a treat. Unix all over, really.

I agree that the operating system was developed by, and intended for, human beings. But more precisely, it was developed by intelligent, computer-literate people *for* intelligent, computer-literate people (or at least intelligent people). Now, 99.9% of the Web is run by Unix servers because it stays up for months and sometimes years at a time without reboots, and because it does what it says it will do and works when it matters. If you want something that guides you by the hand with cotton gloves on, try Microsoft's IIS. As long as you don't mind the constant reboots/crashes and

everyone else having access to your data that shouldn't, you should find the whole thing a breeze.

KEITH GRANT
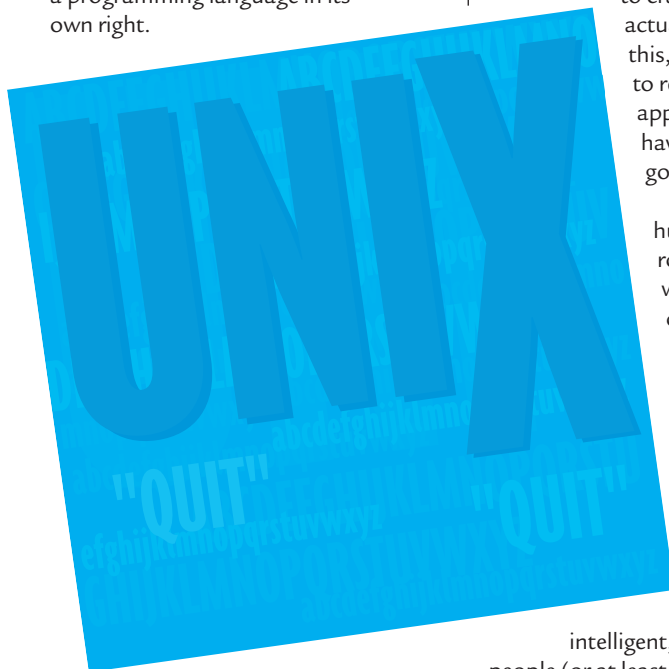Keefer@clara.co.uk

Brian Clegg replies >

I agree that keeping Unix lean and mean 20 years ago made sense, but I'd now argue that it isn't fit for exposure to human beings (as opposed to programmers) until it stops imposing its case sensitivity on the world. People simply don't work that way and it is lazy programming to expect the user to do the work rather than the computer; that's why we buy them, after all. I think there are several languages that aren't case-sensitive as far as variables go. I don't think Algol is and I know Basic isn't (although I suppose you'd argue that's not a language). Unix is reliable and I love its reliability, but that's no reason to be unfriendly.

I'll never be won over on the password issue. You can't expect people to know what case they're typing when they don't get an echo. Mixed case passwords would only be valid if you had mixed case echo characters, I think.

I loved Brian Clegg's comments (*PCW*, September 1999) about the helpful software that explains that: 'You are in reporting mode; to do this you should be in entry mode."

My favourite example was in the Focus database software that ran on a Vax. If you typed 'Quit' to leave the program, you received the helpful message: 'Type Exit to quit Focus!'

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