# Trouble and **strife**

Why can't you use Windows NT Workstation to support a third-party web server?
Because of a legal limitation imposed by Bill Gates. Chris Bidmead tells the sorry tale.

**A**s I write there's a row going on — I hope resolved by the time you read this — about the licensing limitations that Bill Gates is putting on the use of Windows NT Workstation. Initially, the beta release of Windows NT Workstation version 4.0 enforced these legal limitations with a software restriction that constrained the number of unique IP addresses that could contact a web server to ten or fewer in a ten-minute period. In response to the howl of outrage from customers and competitors, Microsoft removed this restriction from the final release version of Windows NT Workstation, but retained the legal limitation set out in the software licence.

Effectively, this means that, although it is functionally capable of doing so, you can't use Windows NT Workstation to support a web server from a third party like Netscape. If you want to do that, you have to pay three times the price ($999 as opposed to $290) to buy Windows NT Server. Strangely enough, if you do this, Microsoft will throw in its own web server free of charge. Which means you'll probably be reluctant to spend an extra $300 with the likes of Netscape, buying its FastTrack web server. Netscape retaliated by sending a letter to the Justice Department complaining about what it alleged was a violation of the US anti-trust laws. The company's attorney, Gary Reback, said that Microsoft was deliberately crippling Windows NT Workstation as a way of encouraging customers to buy an all-Microsoft solution. My first reaction to this was to shrug and say, well, it's Bill's ball-game and if that's how he wants to sell Windows NT, it's entirely his affair. More power to Linux, which will not only run

Netscape's web server, but also in most distributions comes with its own GNU web server, Apache. No restrictions, and no charge. But the issue goes rather deeper than that. It centres on TCP/IP, the open network connection protocol on which the internet is founded. Tim O'Reilly, who heads up the O'Reilly publishing company, evidently cares about preserving open

computing. His company built its reputation by publishing highly-regarded books about Unix, and a more recent crop of books about Windows NT has been instrumental in establishing the credibility of Microsoft's new operating system in the market.

Here's what the Windows NT Workstation licence says: "...You may permit a maximum of ten computers to

connect to the Workstation Computer to access and use services of the software product, such as file and print services and peer web services. The ten connection maximum includes any indirect connections made through software or hardware which pools or aggregates connections. "My italics. Putting a licence restriction on file and print services is standard practice for LANs using a proprietory transport protocol like IPX or NetBIOS.

But the internet isn't a LAN. It's truly open territory, and it uses an open transport protocol. You don't know how many people are going to be visiting your web site, and if you had to issue client licences to everybody before they could do so, the web would never have got started.Tim O'Reilly points out that the legal restriction is even more stringent than the original software dongle. "The limitation has been expanded, from 'ten users in ten minutes' (the original limitation) to 'ten users (period).' We believe that Microsoft's position amounts to nothing more than a 'land grab' in the uncharted territory of the internet."

He counters my comeback that Bill has a right to do what he wants with his own operating system by pointing out that TCP/IP, which is where the restriction lies, isn't his [Gates], or anybody's, to mess around with like this. "TCP/IP is not a Microsoft product, and I don't believe Microsoft has the right to tell application vendors and users what they can and can't do with it. TCP/IP is a fundamental service for internetworked systems."

To hammer home this argument he concludes: "If you accept that Microsoft has the right to tell users how many sockets their applications can have open, you must also accept that they have the right to tell users how much memory their applications can use, or how much processing power."

Netscape is angry because its business is being threatened. Tim O'Reilly is angry because a principle is being violated. I've been known to get too hot under the collar about issues like this in the past, but this time the most action it gets from me is a quick shrug. It's not that I don't believe O'Reilly is right. Of course he's right. The point is, Microsoft's behaviour over this licensing business simply confirms what I've long suspected. When it comes to the internet, despite his much-publicised 180-degree turn at the end of last year, Bill really doesn't get it. As the old Bob Dylan song says: "Something is happening, but you

don't know what it is. Do you... Mr Jones?"

At the end of 1992, Microsoft launched a product called Windows for Workgroups. It was NetBIOS joining a bunch of local machines together. The machines all ran Windows, and Bill owned Windows and he owned NetBIOS. It seems like a hundred years ago. Only a few months after that launch, the Mosaic web browser arrived and we all clamoured to get onto the internet. Now, for the first time, our desktop machines were properly connected. Globally. And it no longer mattered what operating system you were running. TCP/IP wasn't just another protocol, like NetBIOS, added to the operating system. It was the other way round. The operating system you happened to be running on the machine in front of you became simply the interface to the main action, carried out in the vast worldwide arena called TCP/IP. It was as if we'd all gone to the cinema and had been sitting in the dark for fifteen years, thinking how comfortable our seats were, or not. And then the film started.

This is what Bill doesn't get. By imposing these kind of restrictions on Windows NT Workstation, he is a tail trying to wag the dog. Either his customers will walk, across to Linux, perhaps, or a third party like Netscape will supply a TCP/IP stack not written by Microsoft that will arguably take the right to restrict clean out of Bill's hands.

Or perhaps people will just ignore the licensing issues. In which case, Bill may well send out agents across the internet to sniff out offenders, and maybe drop writs on their web servers in the form of a Word for Windows macro virus. It will all get very silly and make more lawyers rich. I return to my first thought: this has got to be good for Unix.

### Ray Noorda still going strong

Microsoft is under attack now from another quarter — a writ from Ray Noorda, the programmer turned billionaire who built Novell up from nothing all through the eighties and is now the force behind Caldera. Caldera has just bought NDOS, the Novell version of DOS that was originally developed by Digital Research Inc. DRI was the company whose 8-bit CP/M operating system helped microcomputers grow from toys to business tools before the arrival of the IBM PC.

Caldera's claims about Microsoft's "various unfair and predatory acts" by which the industry was force-fed with MSDOS to the detriment of competitive products all

## Caldera

Last month I mentioned System Commander, the handy multiple boot utility distributed in this country by POW!, a Dorset-based distribution company. It's headed up by (and I suppose named after) an old acquaintence of mine called Daniel Power. One of the best things about writing a column is that you get old chums popping up out of the blue like this, and it's doubly pleasing when they turn up with a product as good as System Commander.

But it's best of all when I hear from people who have actually been reading the column. Daniel gave the game away with a follow-up missive, which I'm going print in full here just for the hell of it.

From: dpowera@cix.compulink.co.uk (Daniel Power)
Subject: System Commander
To: bidmead@cix.compulink.co.uk
Cc: dpowera@cix.compulink.co.uk
Reply-To: dpowera@cix.compulink.co.uk

"Are you interested in Linux derivatives/Intranet servers? I am in the process of launching a reworked version of Linux with an X Windows interface, free Netscape etc. The installation is simple, the product more accessible to the end user. It will cost 99 pounds. The product is from a company called Caldera. I don't know if you know anything about them but it is a project that was dropped from Novell and is now funded by the Ray Noorda family trust fund."

I wrote back to tell him to say that, well, yes, my readers and I have been tracking Caldera for about 18 months now, and know it quite well. But a UK source is always useful, especially if you're offering some kind of support. Unfortunately, POW! isn't in a position to do that yet, so the product is being distributed through Lasermoon for the time being. Here are the details:

Lasermoon <sales@lasermoon.co.uk> Phone 01329 834944
**Caldera Network Desktop £70 (plus VAT)**
**WordPerfect plus Motif Licence £166 (plus VAT)**
**Internet Office Suite £250 (plus VAT). Includes WordPerfect, Nexus spreadsheet and Zmail**

Daniel tells me that the best email address for his own company is sales@pow-dist.co.uk, and they have a website at www.pow-dist.co.uk. Full details of Caldera are on the Caldera web site at www.caldera.com.



**Noorda: Has issued a writ on behalf of Caldera, claiming that Microsoft, with the total domination of MSDOS, virtually hijacked the eighties**

through the second half of the eighties and beyond will strike a familiar chord to anyone studying the current Windows NT Workstation licensing affair. Ray Noorda seems to have a couple of genuine business aims here, as well as punishing Microsoft for its past misdemeanours. He wants to be able to reinstate Digital Research's DOS as part of the Caldera Linux distribution, strengthening its powers as a "network desktop"; and he wants guaranteed disclosure by Microsoft of "all APIs for any operating system it produces, as well as any modifications, enhancements, updates, or new versions of such operating systems at the time that such products are released for beta testing." This fits with Noorda's plans to enhance Linux to the point where it will be able to run Windows applications.The ramifications of this are vast, and there isn't space to rattle on about it here.

If you want to know more, the whole legal case, with a history of "Microsoft's Growth and Domination" and Caldera's "Claims and Prayers for Relief" can be read on http://www.caldera.com/news/complaint.html.

### Readers write

Long-suffering readers will remember that back in May of this year I ran into an absurdly simple problem with Unix that may well baffle anybody coming to the environment from DOS or Windows. I'm talking about the business of batch renaming files. In Unix you don't, philosophically, rename files — you move them. The same command, mv, is used either to shift a file from one directory or another, or to change its name. This, in itself, takes a little getting used to, but it gets worse when you start looking for an equivalent of DOS shortcuts like REN *.BAT *.BAK. Because Unix doesn't handle batch renaming like this.

The solution I stumbled on was to use the FOREACH command — roughly the equivalent of the DOS FOR batch command. It works like this:

```
> foreach f ( *.tiff )? mv $f
$f:r.tif? end
```

This works fine, but is a little long winded because the foreach command is actually a mode that you enter, throwing up its own prompt (the question mark) and requiring the keyword "end" to exit. Great for Unix buffs, but what my simple, DOS-educated spirit craved was a one-liner. As luck would have it, a Unix buff has responded to my plea. The solution, as you've probably guessed, is a shell script that takes care of the multiple renamings and can be tailored to handle the parameter you pass it to suit your taste.

I like the script that Dr Rich Artym <rartym@galacta.demon.co.uk> has sent me, because it exemplifies one of the things that appeals to me most about Unix: the ability to make it work the way you want it to work. Of course, you need to understand something of the arcane machinery below the surface to do this properly. Two O'Reilly books, *Using csh & tcsh* and *Learning the bash Shell*, have been invaluable foglamps for me as I grope my way through the murk.

The Artym solution to batch renaming can be found on this month's cover CD.

### Where does UNIX begin and end?

After much discussion, we've settled on calling this column just plain "UNIX". I suppose this avoids any ambiguity (one proposal from a *PCW* staff member was "Hardcore Computing"), and certainly the venerable operating system is the basis of my thoughts and researches here.

But I wouldn't want you to feel that we are in any way ghetto'd by the new title. The spirit of the column reaches far, er, rambles, some might even say, over a wide range of computing issues that tend to be neglected by the Windows-centric mainstream computer press. A great deal is happening "outside the Gates", as I tend to think of it, and some of it is even happening here on my own network. Not that Windows is excluded — how to keep the really good stuff like my NeXT workstation connected to the merely useful world of Windows is an issue I'll continue to pursue. And I hope you'll stay with me as I do.

---

**•PCW Contacts**

**Chris Bidmead** is a consultant and commentator on advanced technology. He can be contacted at **bidmead@cix.compulink.co.uk**