internet Osi

Speed ills

56K modems? Pah! They don't work at that speed. In the US, dual V.90 modems will boost your connection speed to 112Kbps. Nigel Whitfield reviews the need for speed on the net.

ou may have thought a 56K modem was more than fast enough, but there are already plenty of people who are trying to push modems ever faster. If you have an ISDN line, you may be used to the concept of channel bonding, where instead of using one 64K link, you can use two and get double the speed (for the cost of two phone calls). In fact, the same trick is performed with my own internet connection. Most of the time it relies on the permanent line to my office, but when that exceeds 95 percent capacity, the ISDN comes on stream to double the link. The latest modems in the US, from the likes of Diamond, are not just V.90. They're dual V.90 with two phone leads, and use two lines to bump up the connection speed to 112Kbps. If you have a call waiting on one line, it will even dynamically disconnect one of the lines to your ISP when someone's phoning you, and reconnect afterwards. Ship a few of these to the UK, swap to a cable operator that charges you the same for two lines as BT does for one. and who needs ISDN?

Flat on its face

For the most part, many people will find that the biggest difference they see is not in download times but in the number of trees used to print their phone bills, now with double the call costs. Okay, so you might have a 56K modem now; but how often do you see flat-out download speeds? And how often do you sit there thinking "2.8K per second isn't great, is it?" I'll bet the latter is rather more likely.

Of course, you're welcome to spend the money if you like, but think how much of what you download really is needed and how much is bloat. What about those massive graphics on web pages where a font change and plain text would do? Or huge updates to further bloat the size of your web browser? Sure, you need some of it;

ISPs should provide

more value to their

business customers

but what you probably need just as much is fast access to the information that's really important, whether it be games,

research, or anything else. And using two phone lines, or dualchannel ISDN, isn't going to make that arrive much faster until something else happens.

It's time for internet providers (few of which make much profit out of domestic customers) to look at providing more value to their business users. Rather than tossing 5Mb more web space at people who pay a tenner a month, the needs of many might be better served if the charges levied for fixed connections were lower. A fast connection at home

may be fine, but if the companies and organisations running the web servers you want to access have to pay around

£500 every month for a permanent net link that only runs at 64Kbps, you will never download files quickly from

them, will you? Speed does matter on the internet, but not just when you're the wrong side of a modem. If surfers have to stay online longer to see the information they want, while information providers are paying a fortune for links barely faster than a single modem, is that really sound economics for anyone concerned, including the providers?

Duestions

& answers

Can I connect to the internet without getting an ISP? As a student, I find that the phone line costs enough without the monthly charge from an ISP.

For most people the answer is a straightforward "no". The internet is a collection of networks, which pass information between them. An ISP operates one of those networks and, for a fee, provides access to it. But there are two avenues worth investigation. The first is a service that BT plans to launch later this year. You'll pay by the minute (no subscription) but that may prove expensive for heavy use. The second option is to find out what facilities are available where you're studying. Many universities have some form of dial-up access which can be used to connect to the net, but you'll have to contact the appropriate people and ask them if there is a service you can use.

I've discovered a good (freeware) program called Catch-up. It tells you if there are any updates available for the programs you are using. It informed me that Rvplayer and Raplayer files could be updated to version 5 (I don't know where these files came from: part of Internet Explorer, I think). Anyway, I downloaded the update and ran it. It would appear to have removed Ryplayer and replaced it with realplay.exe. But the Raplayer file still exists as version 2.1. Is this program required, or, in the update from 2 to 5, has Realmedia changed both the default location and filename, thus leaving redundant files around?



These files are part of the Real Audio and Real Video systems which are used to enable you to hear sounds or watch videos over the net without having to first download the whole file. It uses a technique called streaming. There used to be two separate programs, one for video and another for audio, but with the latest version they've been combined into one RealPlayer, the file realplay.exe. You can safely remove Raplayer from your system.

I need to identify the email address of callers to my web site, so I tried using the Server Side Include technique vou talked about in your January column, but with no luck. AOL said this was a "coding" issue and outside the rules of its support line. Do I have to get my provider to switch on these SSI goodies? How do I get these environment references to show within my HTML?

Yes, Server Side Includes do need to be enabled on the server to achieve the effect I wrote about. However, there are some alternative solutions which can be used with browsers that support scripting and have it turned on. There are a number of variables that are set automatically in JavaScript, so if you want to find out where someone was before they came

to your page, you need to look at the "document.referrer" variable. How you use this depends on whether you want to display to the user where they came from, or save the information for your own

REAL-TIME VIDEO AND AUDIO STREAMING

ensure you receive this information whenever

someone looks at your page, as many people may have turned scripts off for security or speed.

• Eudora update In the August column I mentioned using Eudora Pro for access to multiple email accounts. Thank you, Susan Lear and Tony Yates, for pointing out that you can do this with the Lite version by creating a separate directory for each user. Making a Windows shortcut gives the path to the directory as part of the



be more difficult). You can find plenty of examples at www.javagoodies.com, with a script to show the last site visited at www.javagoodies.com/ comingfrom.html. To save the information you may need to use JavaScript to load the "document.referrer" into a hidden field on a web form, which can be posted when the user clicks on PCW CONTACTS another link. But

unlike using SSIs, there's no foolproof way to

could specify the name of the INI file if you want to share folders but have different email addresses. Mac users can create copies of the Eudora Folder (System Folder) for each user, with a unique name, and start Eudora by clicking on the

Settings file in the appropriate folder.

Nigel Whitfield by post via PCW (address, p10) or email internet@pcw.co.uk