

Speed freaks



When NTL and Telewest launched their top-of-the-range, ultra-fast broadband services last year they were met with howls of incredulity. Who could possibly want all that speed? Well, quite a few of us actually. Guy Dixon investigates

Just six months after its June launch, cable telco Telewest announced the 25,000th signup to its 1Mbps (megabits per second) service, representing around 10 percent of its broadband userbase. While NTL is typically more cagey when quoting specific numbers, we reckon it can also boast at least as many 1Mbps customers, especially given that it had a three-month headstart.

Broadband is here to stay and things are only going to get faster – as long as you're one of the 60 percent of the UK population fortunate enough to live in a broadband-enabled cable franchise. Users of residential ADSL (asymmetric digital

subscriber line) will have to make do with maximum downstream speeds of 512Kbps (kilobits per second) unless you're fortunate enough to live in central London (see *What a load of Bulldog* on page 130). Telewest in particular appears keen to put its foot on the broadband pedal, with hints that we could be looking at connection speeds of 3Mbps by the end of 2003.

Moore's law, which dictates that processor power doubles every 18 months, may at last appear to be floundering as our appetites for raw chip speed dampen in the absence of any drastically power-dependent applications. By contrast, our thirst for broadband speeds shows little sign of abating.

A recent PCAdvisor.co.uk poll, for example, indicated that more than 60 percent of readers would opt for the fastest connection they could get.

But who are these early adopters and so-called speed freaks? And what are they using their 1Mbps cable broadband connections for?

Luke the learned

Bill Goodwin, director of internet at NTL, has noticed a lot of interest from the student community. He points to a particularly high takeup in the Cambridge area – an NTL franchise location.

Goodwin's findings tally with the experience of *PC Advisor* reader Luke



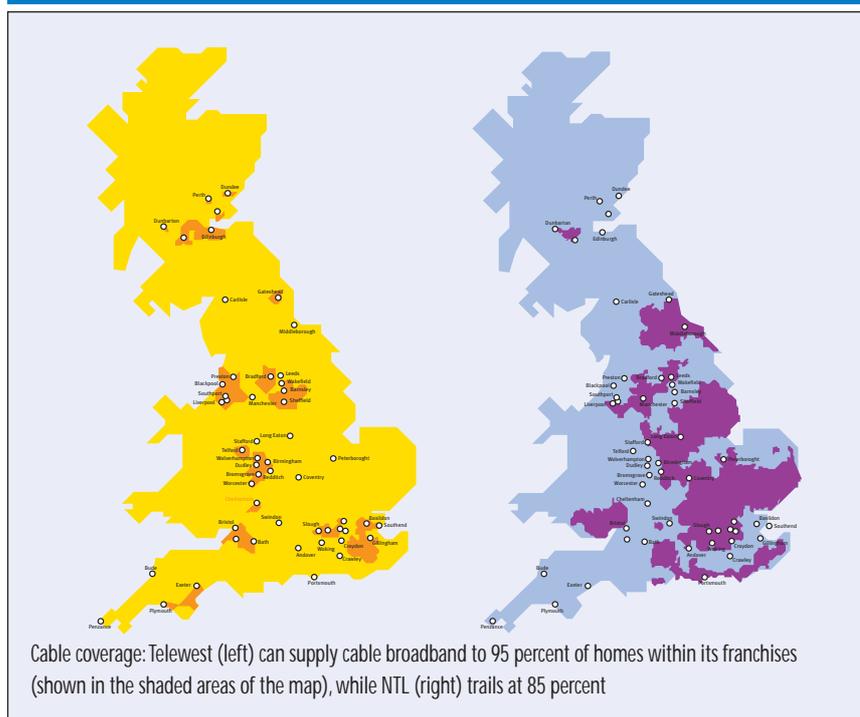
Radford, a student who's doing a BSC in Business Information Technology at Gloucester University. He upgraded to Telewest's Blueyonder 1Mbps service in September last year.

"The University of Gloucester uses an online application called WebCat, which enables students to book, request and renew resources in the learning centre," explains Luke. "This is so much easier at a quicker speed. Also many lecturers post notes from lectures and additional course resources online."

Luke points to the increasingly collaborative nature of undergraduate study as another reason for upgrading. "When working as a group it's often easier to put documents on webspace so we can share ideas. This is much quicker on a 1Mbps connection. As a business IT student I find that a lot of my assignments draw on material found online, so higher-speed connection is a great benefit for research."

As well as working towards his degree Luke also looks after two websites – the

Cable broadband in the UK



Gloucester University's Christian Union's (www.ugcu.co.uk) and a site for a small car dealership (www.carsmartdevides.co.uk). He constantly updates both sites via FTP (file transfer protocol).

"The performance has dramatically improved since upgrading to 1Mbps," says Luke. He currently has around 80 Jpegs to put on the Christian Union site, following a recent event. "Uploading that lot on dialup could take up to two hours, but on a 1Mbps connection it will be done in 10 minutes."

Since upgrading to a 1Mbps connection Luke compares using the internet to any

other locally stored software application. "Having a speedy always-on connection means you don't get frustrated or annoyed with it all the time."

Game on

Online gamers have also been quick to grasp the 1Mbps nettle. Avid gamer and *PC Advisor* reader Darren Ward upgraded from NTL's 512Kbps service to its 1Mbps package back in October after being in constant bandwidth competition with his wife. Darren found his online gaming performances were being called into question if his wife was downloading large files at the same time. In a bid to stave off marital friction they decided to fork out the extra cash for a 1Mbps connection.

To get one over his online rivals, Darren was also after a lower ping rate (the lower the ping rate the faster your PC

↑ There are plenty of speed freaks surfing the web who are just itching to get their hands on the fastest broadband connection around

communicates with the server). This allowed him to see things before his fellow gamers, giving him that crucial split-second edge over his competitors. Recommending Medal of Honor Allied Assault as his favourite 3D online shoot-'em-up, Darren says: "It's actually even more fun if the other player has a 1Mbps connection as well. It's almost like playing in real time."

Don't shoot the messenger

Almost all broadband ISPs – ADSL and cable alike – have found that broadband customers increase their use of instant messaging – for example, Windows Messenger and AIM (AOL Instant Messenger) – in line with the increase in speed of their connection.

Darren belongs to a gaming clan which frequently exchanges increasingly hefty files using Windows Messenger. "The upload via a 1Mbps connection means that data I send is received much quicker," he explains. Darren cites a recent occasion when he sent a 130MB demo of the Medal of Honor Allied Assault Spearhead expansion pack to a fellow clansman using Windows Messenger; this took less than half an hour.

Joe the downloader

For *PC Advisor* reader Joe Copeland the improvements in sheer download speeds is a compelling enough reason to upgrade to a 1Mbps connection. He moved up from Telewest's 512Kbps service in August 2002 and has found his online habits have since changed. "Whereas before I would wait until evening to download stuff, I now do it whenever I want," he says. "It gives me complete freedom to do what I want, when I want."

PC Advisor poll

When it comes to broadband speeds for the home:

I'll take the fastest I can get

 (61.0%)

512Kbps is quite fast enough

 (39.0%)

From a total of 1324 votes

Reader Darren Ward sent a 130MB demo of the Medal of Honor Spearhead expansion pack in less than half an hour

What a load of Bulldog

Faster speeds – that is, downstream speeds in excess of 512Kbps (kilobits per second) – from ADSL (asymmetric digital subscriber line) resellers have so far been aimed at business users with price points to match. However, just before Christmas, ISP Bulldog Communications announced a downstream 2Mbps (megabits per second) ADSL product called PrimeTime 2000 which is aimed at home users and is priced at £39.99 per month with a £99 activation fee. A 1Mbps package (Primetime 1000) is also available at a cost of £34.99 a month.

The bad news is that both Primetime packages will initially be restricted to

residents in central London, since it relies on the LLU (local loop unbundling) exchanges Bulldog has running in the capital. The other problem is that the top speeds are only available at off-peak time; during peak hours top speeds are reduced to 512Kbps. The following counts as off-peak:

weekends, 6pm to 8am each week day and all day on bank holidays. Upstream connection rates are also extremely impressive with maximum speeds of 400Kbps.

Bulldog is generally thought of as being a business ISP. As such it has spare capacity outside normal business hours, allowing it to offer the increased speeds during off-peak times. Should Bulldog succeed it's likely that many other business ISPs will follow suit. For details visit www.bulldogdsl.com or phone 0845 452 0052.

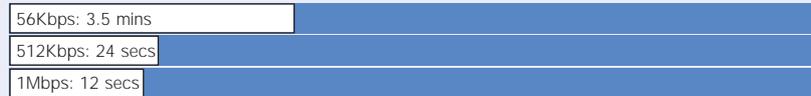


Now that's impressive

Still not convinced about the ultra-fast 1Mbps broadband connection? We compared it to a standard 56Kbps setup and the more common 512Kbps broadband connection. We downloaded three common files – a video clip, MP3 track and software application – and timed how long it took using each of the three connections. Our results are shown below.

NB: these examples assume that each medium is transmitting at full capacity. Quoted download times are based on all technologies working at optimum speed. In practice factors such as the speed a website can support, the amount of traffic accessing it and content caching can cause quoted download times to vary.

Downloading a 1.5MB video clip



Downloading a 5MB MP3 track



Downloading a 10MB software application



With a 56K modem Joe estimated it took him four and a quarter minutes to download a 1MB file. With the 512Kbps connection it took around 20 seconds and now with the 1Mbps service it takes just seven seconds. It doesn't stop there, as Joe's already looking forward to faster speeds. "If a faster connection was available I would certainly think about it," Joe says.

Time is on my side

Reader Paul Bournat, who goes by the name of Jester2k in our popular online forums, reckons that he actually spends more time online. This is despite the fact that he can get things done much quicker over a 1Mbps connection.

"I can do more in less time but I also end up using that 'spare time' to surf even more," he explains. Even though Paul no longer has to wait hours for a game to download or 25 minutes to update his antivirus software he finds himself doing "more video streaming, more downloading, more surfing and more online gaming". Paul continues, "I can shop around for goods quickly and I know the connection won't drop in the middle of a transaction."

This pattern of top-speed users like Paul embracing new types of online activity, when they would previously have been twiddling their thumbs, is borne out by recent research in the US. Internet measurement firm comScore Media Metrix found that those with a high-speed connection tended to surf the internet every day compared to dialup users who logged on just 18 days per month.

Another benefit Paul has discovered is that moving up to a 1Mbps connection has helped him run his freeware website, www.jester2k.co.uk, more effectively. "The benefit of this connection is that uploading new pages is almost instantaneous," he says. "If I release a new version of a piece of software or make changes to pages I want it to be quick and reliable. I also want to be able to check whether there have been any mistakes. A connection speed of 1Mbps makes it that bit easier and snappier."

Where's the content?

The biggest critics of high-speed internet access point to a lack of genuinely compelling content and the emergence of a catch-22 situation. Until the highest

As broadband sites like British Pathe gather in number, the thirst for increased speed will intensify

broadband speeds approach mass market status, content providers won't invest the kind of time and money that quality video encoding requires.

Such accusations carried weight two years ago when broadband first landed on UK shores. But anyone looking at the broadband websites recommended on page 134 will see this view is increasingly out of date.

And as broadband-optimised sites like British Pathe (www.britishpathe.co.uk) gather in number, the thirst for increased speed will intensify. For cable telcos especially, the technical challenge of cranking up the dial speed is not significantly technically taxing.

For the user, further increases in speed are a software constraint, rather than a hardware one. In other words, today's 1Mbps users will be tomorrow's 3Mbps users via the same cable modems or modern set-top boxes.

As ever we're following in the footsteps of the US, where 1.5Mbps cable broadband connections are the norm and 3Mbps isn't unusual. And if you compare the US with broadband world leader South Korea, which already has 20Mbps services on the horizon, our first-generation 512Kbps connections are beginning to look a bit long in the tooth. ■

Which will you choose?

We compared the prices of NTL's and Telewest's standard 1Mbps (megabits per second) services.

- NTL **Standard monthly fee: £34.99; installation: free until 28 February 03.**
- Telewest **Monthly fee: £39.99 (without other Telewest services) £34.99 (with Telewest phone or TV services); installation: £50.**