

## Internet service providers

**AOL**

**BT Internet**

**ClaraNET**

**CompuServe**

**Demon**

**Direct Connection**

**Global Internet**

**I-Way**

**LineOne**

**Mistral**

**MSN**

**Pipex Dial**

**Virgin Net**

**Which? Online**

**X-Stream**



# ARE YOU BEING SERVED?

**The Internet is accessible from just about every corner of the world, but you'll need an account with an Internet service provider before you can get online. We've compared 15 ISPs to help you decide which is the best for you**

**S**urfing the Net. Cruising the information superhighway. Browsing the Web. If these terms have you reaching for a wetsuit, a road atlas or your copy of *The Big Book of Spiders*, then you're missing out on the biggest thing in the world of communications since man first learned to wave – the Internet.

With more content than the biggest library, the Internet has revolutionised the way we think about information. It's accessible from just about every corner of the world, and all you need to be a part of it is a telephone line and a PC with a modem. Your PC uses the modem

to make a call to one of the computer systems that form part of the Internet and once connected you're 'online' and ready to go.

However, you can't just dial up anyone's computer system to get onto the Internet. You have to dial into a computer that's been set up for this very purpose and these are maintained by companies called Internet service providers, or ISPs.

All ISPs charge for the service they provide, but both prices and service can vary enormously. So when it comes to choosing the one that's best for you, you have to consider what you want to get





out of your time online. There are dozens of ISPs out there, each catering for different needs, and this month we put them to the test.

## Why do I want to be online?

Just like anything to do with computers, once you've tried the Internet you'll wonder how you managed without it. Since ISPs charge a monthly fee though, it's worth knowing a little about what the Internet can do for you before you start paying for it.

As it contains information on every topic under the sun, the Internet is a great research tool. No matter how specialised your requirements, you can bet that someone, somewhere, has information on the Internet about it. Many companies have an Internet presence, as do most academic institutions. Add to this thousands of other organisations and individuals, both professional and amateur, and you end up with an invaluable reference tool that's available 24 hours a day in the comfort of your own home.

Another major use of the Internet is for electronic mail (e-mail). E-mail lets you instantly communicate with anyone, anywhere, for the cost of a local telephone call, so long as they have an e-mail address too. If you have friends or relatives overseas, e-mail is an ideal way to communicate with them cheaply and quickly. E-mail doesn't limit you to just words, either – anything you store on your PC can be sent, whether it's a picture, video or sound recording.

If letter-writing isn't your forte, you can also chat in 'real-time' via the Internet. Type messages in a window on your PC and they appear on the other person's screen straightaway, no matter where they are.

Finally, if you have an interest that isn't mentioned anywhere on the Internet, why not create your own online presence? Most ISPs provide some space on the Internet (or rather on its graphical part – the World Wide Web) for their members to use, and creating your own Web page for the world to see is very easy.

## What do I need?

To access the Internet you need a PC, a modem and a telephone line. Your modem should be at least a 28.8Kbits/s model, and all the ISPs here support connections from 33.6Kbits/s modems, which are a little faster.

56Kbits/s modems have been available for some time, but ISPs are only just beginning to support them. The problem was that there were two differing 56K standards – x2 and K56flex – and unless

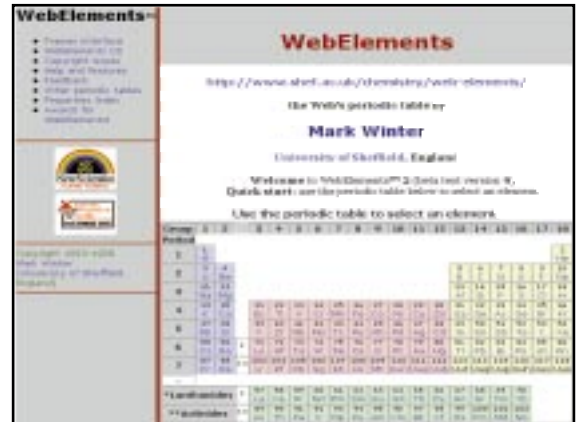
**Right: The Internet is a great reference tool, with information on almost anything you can imagine.**

**Below right: E-mail lets you communicate with people around the world quicker than a letter and cheaper than a phone call. You can even send pictures!**

your ISP specifically supported your type of modem, it would only work as a 33.6Kbits/s model.

Some ISPs support x2, some support K56flex and a few support both. 56Kbits/s modems will soon be governed by a single standard, called V.90. Once this becomes official, you can expect all ISPs to support it and everyone will be able to use a V.90 modem to connect to an ISP at 56Kbits/s.

The last ingredient in



## What is the Internet?

**T**he Internet started life in the 1960s, when US researchers began to experiment with ways to link computers together over the telephone network. Funded by the US Defense Department's Advanced Research Projects Agency (ARPA), the research culminated in ARPANet – a network that sent information by breaking it into small chunks called 'packets'.

The clever thing about ARPANet was that every packet of data sent over it knew exactly where it was going and the route taken to the destination was irrelevant. This meant that ARPANet was very robust – if part of the network failed, packets simply found another route. It also meant that computers could send information over the network at the same time with no chance of the packets getting mixed up.

As ARPANet developed, various 'internetworking' standards were introduced, and by the 1970s the so-called Internet had spread from the US to around the world. More networks were linked to it by the 1980s, and non-government users started to figure out ways to connect their computer systems to it. Commercial organisations took an interest too, since the Internet offered a way to distribute information quickly, easily and cheaply around the world.

The original ARPANet was decommissioned in 1990, but the Internet has grown exponentially since then. What originally linked two computers together in 1962 now covers every continent and even extends into space. In 1996, it was estimated that the Internet connected more than 25 million computers in over 180 countries – and we've only just begun to tap the Internet's potential.



# Internet service providers

the Internet mix is software – the programs that you will use to actually dial your ISP and access the Internet. Many ISPs send you a CD-ROM containing the necessary software but some simply use programs that are part of Windows 95.

It is possible to get online with just the name and password provided by your ISP but most ISPs' software will hold your hand through the connection process.

## How much will it cost?

With some ISPs you have to stump up a connection fee before you get anywhere near the Internet, but most simply charge you a fixed monthly fee. How much you're charged varies, but the majority offer two different types of account.

The first is usually called the light users scheme, and you get a few hours of Internet access each month for a low fee. If you only go online occasionally, this is a good way to do it, but beware – go over your allotted hours and there's a hefty hourly charge. If you plan to be online a lot, then an unlimited scheme is better. For around £15 a month, this lets you use the Internet for as long you like, with no extra charges.

There are a couple of exceptions here. The first is I-Way, which charges an annual fee of £117.50 for unlimited access. Do your maths and this works out at a reasonable £9.80 a month, but bear in mind that the fee is payable up front. Worse still, if you decide to drop out partway into the year, you don't get a refund. With a monthly fee, the most you can lose is one month's payment.

The second notable exception is X-Stream. This ISP doesn't charge a monthly or annual fee – in fact, it

**Right: If you want your own presence on the Internet, most ISPs can provide personal Web space.**

**Below right: Online services like AOL make the Internet much easier to use by organising their own content.**

doesn't charge a fee at all! X-Stream generates its income through advertising. When you register, you have to complete a small questionnaire and then when you log into the service your browser displays small but nevertheless irritating advertisements targeted specifically at you.

Finally, don't forget that when you're online you're making a phone call and these aren't free. Fortunately, all but one of the ISPs can connect you to the Internet for the cost of a local call, no matter where in the UK you are. X-Stream can't, unless you live in or around London,



but since the service is otherwise free, you can't really complain.

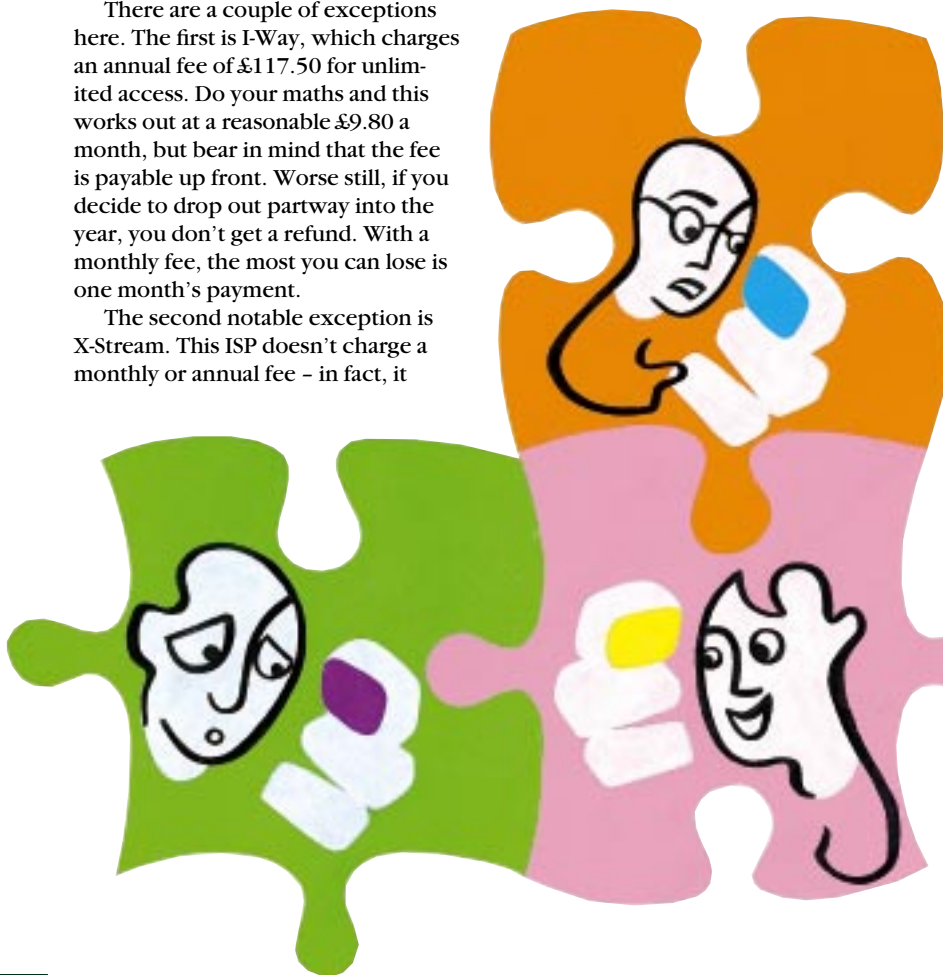
## So what do I get?

Signing up with an ISP obviously gives you access to the Internet, but it also gives you more than you might think.

Every ISP provides at least one e-mail address to its subscribers. E-mail sent to you waits on your ISP's computer system until you connect to it, at which point it's sent to your PC for you to read. If there's more than one person in your family who wants e-mail, look at an ISP that provides multiple addresses. AOL, for example, gives five e-mail addresses, whereas ClaraNET, Demon, Direct Connection and Global Internet offer an unlimited number – perfect for large families or small businesses.

If an ISP offers a POP3 e-mail address, you'll be able to pick up your e-mail using any e-mail program. You might not want to do this, but it gives you the chance to use the more sophisticated e-mail handling features of programs such as Microsoft Outlook. Pipex Dial even lets you read your e-mail using any Web browser. So, armed with your username and password, you can read your e-mail using any computer that is linked to the Internet – which is useful if you do a lot of travelling.

Access to the Internet also gives you



## Internet service providers compared

	AOL	BT Internet	ClaraNET	CompuServe	Demon	Direct Connection	Global Internet
Product	<b>Connection fee (inc VAT)</b>	n/a	n/a	n/a	£14.60	£8.80	£11.75
	<b>Unlimited access monthly fee (inc VAT)</b>	£16.95*	£11.75*	£11.63*	£6.50 for 5 hours, additional hours £1.95	£11.75	£13.50
	<b>Payment options</b>	Credit card, debit card	Credit card, debit card	Credit card, direct debit	Credit card, direct debit	Credit card, direct debit	Credit card, debit card, cheque, direct debit
	<b>Minimum contract</b>	1 month	1 month	1 month	1 month	1 month	1 month
Specifications	<b>Local call access</b>	●	●	●	●	●	●
	<b>Number of e-mail addresses</b>	5	5	Unlimited	1	Unlimited	Unlimited
	<b>POP3 mailbox</b>	○	●	●	○	●	●
	<b>Personal Web space</b>	2Mb per e-mail address	5Mb	5Mb	5Mb	5Mb + 2 RealAudio channels	3Mb
	<b>Newsgroup access</b>	●	●	●	●	●	●
	<b>Software supplied</b>	AOL 3.0	Internet Explorer 3	Internet Explorer 3, Atlantis e-mail software	CompuServe 3.04	Demon Internet Suite including HoTMetaL 3 Light	Internet Explorer 4
	<b>Operating system</b>	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac
	<b>Maximum modem speed</b>	33.6Kbits/s	56Kbits/s	56Kbits/s	33.6Kbits/s	33.6Kbits/s	56Kbits/s
	<b>56K modem support</b>	Planned	All	All	○	Planned	K56flex
	<b>Technical support</b>	Mon - Fri 8am - 10:30pm, Sat 9am - 9:30pm	24hrs, 7 days	24hrs, 7 days	8am - 12am, 7 days	24hrs, 7 days	Mon - Fri 9am - 9pm, Sat & Sun 10am - 5pm
Ratings	<b>Ease of installation</b>	★★★	★★★★	★★★★	★★★★★	★★★	★★★★★
	<b>Ease of use</b>	★★★★★	★★★★★	★★★	★★★	★★★	★★★★★
	<b>Features</b>	★★★★	★★★★★	★★★★★	★★★	★★★★	★★★★★
	<b>Value for money</b>	★★★	★★★★★	★★★★★	★★★	★★★★★	★★★★★
	<b>Overall</b>	★★★★	★★★★★	★★★★	★★★	★★★★	★★★★★
Extras	<b>Contact</b>	0800 376 5432	0800 800 001	0171 903 3000	0990 000200	0181 371 1234	0800 072 0000
	<b>Web site</b>	www.aol.co.uk	www.bt.com/internet/index.htm	www.clara.net	www.compuserve.co.uk	www.demon.net	www.dircon.net
	<b>Notes</b>	Online service based around own software. New members get first 50 hours free in first month.		First month free.	Online service based on Internet Explorer 3. First month free with 750 free hours.	30-day free trial.	Excellent documentation. Will install and configure software for £35.24.

★ = Poor ★★ = Below average ★★★ = Average ★★★★ = Good ★★★★★ = Excellent

○ No ● Yes \* Light user option available

access to Internet Newsgroups. These are a hangover from the early days of the Internet and they provide a way to hold discussions with other people on a bewildering variety of subjects.

If you want your own presence on the Internet then the personal Web space provided by your ISP will also come in handy. Around 5Mb is the average, and this is plenty for all but the most ambitious of Web sites. ISPs like LineOne and Virgin Net provide 10Mb, but most ISPs can increase your space for a small charge. An ISP won't necessarily supply

the tools you'll need to create a Web site, so you might have to invest in a program like Microsoft FrontPage.

AOL, CompuServe, LineOne and MSN are more than just ISPs, they're online services. As well as access to the Internet proper, online services also provide their own content. AOL even goes so far as to use its own custom software to access the service, rather than rely on a browser, which does simplify navigation for new users. Online services don't contain much that can't be found elsewhere on the Internet, but the informa-

tion is more logically presented and so easier to use. Online services also vet their information, so there's little chance of coming across something that might offend (unlike on the Internet...).

### Problems

No matter how foolproof the software supplied by an ISP is, you will, at some point, encounter problems. Usually, your software won't talk to your modem and you won't be able to get online. When this happens, you need to speak to technical support.



I-Way	LineOne	Mistral	MSN	Pipex Dial	Virgin Net	Which? Online	X-Stream
n/a	n/a	n/a	n/a	£13.51	n/a	n/a	n/a
£117.50 annually	£14.95*	£9.99	£14.95*	£14.98	£11.99	£14.75 (£11.75 for Which? subscribers)	Free
Credit card, direct debit, cheque	Credit card, direct debit	Credit card, cheque, standing order, debit card	Credit card	Credit card, debit card, cheque, debit card	Credit card, direct debit, debit card	Credit card, direct debit	n/a
1 year	1 month	1 month	1 month	1 month	1 month	None	n/a
●	●	●	●	●	●	●	London and surrounding areas only
5	5	1	1	5	1	1	1
●	●	●	●	●	●	●	○
5Mb	10Mb	2Mb	n/a	5Mb	10Mb	2Mb	n/a
●	●	●	●	●	●	●	n/a
None	Internet Explorer 3	Internet Explorer 3	MSN 2.5	Pipex Dial 5, Internet Explorer 4	Netscape Navigator 3, CyberSitter	Netscape Navigator 3	X-Stream Network
Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 95	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Win 3.1, Win 95, Mac	Windows 95
33.6Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s
Planned	All	K56flex	All	All	All	x2	K56flex
8am - 7pm Mon - Fri	Mon - Fri 8am - 12am, Sat & Sun 8am - 10pm	Mon - Fri 9.30am - 5.30pm, Sat 10am - 4pm	Mon - Fri 9am - 9pm, 9am - 6pm Sat, 10am - 5pm Sun	Mon - Fri 9am - 8pm, 10am - 6pm Sat	24hrs, 7 days	24hrs, 7 days	24hrs, 7 days
★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★	★★
★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★
★★★★	★★★★★	★★★★	★★★	★★★★★	★★★★	★★★★	★★
★★★★	★★★★	★★★★	★★★	★★★★	★★★★	★★★★	★★★★★
★★★	★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★★
0118 958 0058	0800 111 210	01273 747432	0870 601 1000	0500 474739	0500 558800	0645 830 240	0870 730 6466
www.iway.co.uk	www.lineone.net	www.mistral.co.uk	www.msn.co.uk	www.dial.pipex.com	www.virgin.net	www.which.net	www.x-stream.com
Unnecessarily complicated setup.	Online service. First 10 hours free.		Online service based around Internet Explorer 4. Dreadful automated customer service.	Online Web site creation, can read e-mail from any Web browser.	First month free.	Online Which? reports for members.	Software must be downloaded from the Web site. Service still under development.

It's not much use trying to solve a problem on your home PC when you're not at home, so ideally an ISP should offer 24-hour support, seven days a week. A few do, but calling at 3am on a Sunday morning may involve a little waiting on the telephone. Mistral Internet and I-Way stand out as having particularly unfriendly technical support opening hours - 9.30am to 5.30pm and 8am to 7pm during the week, respectively. Mistral is also open from 10am to 4pm on Saturdays, but even so, you may not be able to get the help you need when you actually need it.



Unfortunately for us, but fortunately for you, there are several excellent ISPs out there and singling one out for our Best Buy award is very difficult.

In the end, it came down to two ISPs - BT Internet and Pipex Dial. Both offer excellent value and a comprehensive range of services. They're also bang up to date with the latest modem technology - essential in these days of 56Kbits/s modems. BT Internet has the lower monthly fee, though, and this nudged it into the lead, making it the winner of the What PC? ISP group test.



Since it only lost out on the Best Buy award by the thinnest of whiskers, Pipex Dial comes in second with a very strong recommendation. The service is packed with features, including online

Web page creation and the ability to read your e-mail with any Web browser.

LineOne is also worth a look, with its wealth of member-only content (including *The Sun* online), and it offers five e-mail addresses and 10Mb of Web space. Direct Connection, Global Internet and Mistral are worth checking out, too - the latter particularly for its low cost. Julian Prokaza