

Broadband Guide

What is Broadband?

Broadband is just a word we use when we're talking about any kind of fast Internet connection.

If you're reading this guide, the chances are that you already have an Internet connection and want to upgrade, or you're setting up an Internet connection at home for the first time.

If you're setting up an Internet connection for the first time, it really makes sense to go for Broadband right from the start, as the entry-level packages are generally much better value than the dial-up alternative.

How is Broadband Different?

A broadband connection is actually not all that different from a dial-up connection. The equipment is very similar - a different kind of modem, but still a modem, and in many cases the connection is still made through your telephone line.

The difference is that you'll have an Internet connection that is always on, 24 hours a day. Normally you pay a flat monthly fee, no matter how often you use the Internet. And a broadband connection is much faster. How much faster? Read on...

What Will I Be Able to Do With My Broadband Connection?

You'll be able to do things that just weren't practical with a dial-up connection. You'll be able to:

- * Watch video clips and listen to music in real time, including live broadcasts.
- * Download music, software, film trailers and other files much more quickly.
- * Play games online.
- * Do everything you could do before, just much more quickly!

Is Broadband Difficult to Install?

Not at all! First, you sign up with an Internet Service Provider (or 'ISP'). The ISP will supply you with your Broadband connection. If you already have an ISP shop around - other companies might offer you a better deal. If you are signing up for a contract, most ISPs will arrange a date to connect you up and supply you with everything you need to get started.

As well as connecting you up, most ISPs will send you a CD. All you need to do is put this into your computer and follow the step-by-step instructions. Some companies offer a home installation service and will send over an engineer to set up your Broadband connection for you. If the thought of setting up your broadband fills you with dread then please give Computer Services Southport a call and we'll get you online.

What are the Different Types of Broadband Internet Connection, and Which Type is Best for Me?

There are only a few different types of broadband connection. And it's usually not hard to choose which type to go for - your choice will probably depend mostly on where you live.

Rule of Thumb: Odds are that you'll choose an ADSL connection for Broadband as it's widely available and easy to set up. Cable might be another option if it's available in your area. Which begs the question: ADSL or Cable? The truth is, one isn't better than another and it really depends more on where you live and how good the supplier is. So, your choice will probably be based upon the deal offered and the reputation of the ISP that provides the service. There are two simple steps you can take to aid your decision: use broadband.co.uk to find the best prices in your area and, if you can, ask around: what ISP do your friends use and is the service good?

The main types of broadband Internet connection are:

ADSL - Asymmetric Digital Subscriber Line

ADSL coverage is available to around 80% of the UK population. As such, it is the most likely choice unless you happen to live somewhere remote, or in an area where cable is available.

ADSL broadband is delivered through your existing BT telephone line, using a special modem or router. There is no need to have an additional telephone line installed and you will still be able to make and receive calls whilst surfing the web.

When you have an ADSL connection it is necessary to fit small devices called microfilters to all your telephone sockets. You need to plug them in to prevent the ADSL signal from interfering with your voice calls. Typically your ISP will provide you one or two microfilters and, if you need any more they only cost a few pounds.

Although you must have a BT telephone line, there are many ADSL Internet providers to choose from, each offering a selection of different deals.

Cable

If you already have cable TV, or if you live in an area served by a cable operator, then a broadband cable Internet connection may be an option for you.

A cable Internet connection requires a special modem, which is connected to your cable along with your cable TV box (if you have one). Most cable companies offer packages that include telephone and TV channels as well as a broadband Internet connection.

As with ADSL, cable Internet providers usually offer a selection of broadband deals for different requirements.

Wireless

In some of the more remote or rural areas of the UK, ADSL and Cable Internet connections may not be available. Increasingly in these areas, smaller Internet providers are providing local coverage using wireless technology. The speed of this connection is often poor unless you are in built-up commercial area, such as city centres.

However a small antenna can be installed on the outside of your house (much like a TV aerial) and this sends signals to a connection point on the inside, which in turn is connected to your computer. No telephone line of any kind is required. This may increase your signal significantly.

LLU - Local Loop Unbundling

While local loop unbundled (LLU) broadband still uses ADSL technology and telephone lines to deliver your broadband, LLU providers like install their own technology in the local BT telephone exchange allowing them to make savings that they can then pass on to customers in the form of “free broadband” and cheap broadband bundles. In all other respects these services are equivalent to the corresponding ADSL connections described above.

Connection Speeds and Download Limits, What Do They Mean and How Do I Choose?

Once you've looked into the options and know which types of broadband Internet are available in your area, the next step is to choose the best deal.

The biggest factor to consider when you choose a deal is speed. How fast is the connection? And is it fast enough to do all the things you would like to be able to do?

Broadband Speeds

256K? 1.5Mb? What do the numbers mean? What speed do I need?

When we're talking about Internet connection speeds, things can be really confusing! For a start, Internet transfer speeds are measured in kilobits per second and megabits

per second, and those are not the same as the kilobytes and megabytes we use when we're talking about hard disks and files.

Entry level 512K broadband Internet connection is around ten times faster than a 56K dial-up Internet connection, , allowing you to view web pages with barely any noticeable delay, whereas with an 8Mb broadband connection, you could watch TV quality video over the web!

Any of the broadband speeds will be perfectly good for viewing the majority of web pages - having to wait a second or two for a page to load is perfectly acceptable.

But the Internet is so much more than just pages of text and a few images: what about music, video, animations, games and all the other stuff that makes the Internet so much fun?

Consider the download time for a typical 5-minute pop song - around one and a half minutes with a 512K connection. The time it takes to download is less than the time it takes the song to play. What this means in practice is that your computer will be able to play the song while it downloads. We call this streaming - the sound 'streams' to your computer fast enough that it can be played as it arrives, without all that waiting around.

Streaming also applies to video. You'll find that many web sites allow you to watch video, even live video, without having to wait around for more than a few seconds for it to start. In many cases video is offered in two or more different sizes or at different qualities - so that you can choose the one that plays best with your connection speed. Having a faster connection means you can watch the video at a larger size and better quality.

And what about gaming? Well, it depends on the type of game. For those of us who want to play a little backgammon or a card game on a wet afternoon, any kind of broadband connection will work fine.

If however you're one of those people who want to take on the world at Counter-Strike or Doom 3, or connect your XBox to the Internet, you may want to consider going for the fastest connection you can practically afford: playing first-person shooters is one of the most demanding ways to use a broadband internet connection. But don't worry too much - most providers will allow you to upgrade to a faster connection at any time (you'll just pay a higher monthly charge).

Rule of Thumb: Here is a summary of our recommendations:

The Best All-Rounder - For the majority of Internet users, a 1Mb deal will offer the best balance between price and performance.

Entry-Level - (256K or 512K) doesn't offer the performance you'll need to be able to get the best out of streaming audio and video. Of course, if you only use the Internet to read web pages and send email, a slower connection may be adequate.

Heavy or Shared Usage - A faster connection (2Mb or faster) is probably worth considering if you intend to play a lot of games, or if you intend to share the Internet connection between more than two or three computers at home or in the office. A connection at the higher end of the scale (4Mb upward) will allow you to take advantage of newer trends - such as video and music on demand or Digital Broadband Internet TV.

Download Limits

Another important factor in your choice of a broadband Internet deal is whether there is a download limit (sometimes called a usage allowance), and how high this limit is.

Not every broadband provider imposes a limit on how much use you can make of your Internet connection, although most have clauses in their terms and conditions to prevent what they consider to be excessive use.

Where download limits are imposed, they can range from as little as 1Gb (one gigabyte) per month to 15Gb or 30Gb per month. What do these numbers mean?

Well, a gigabyte is a bit less than the amount of data that fits on two CD-ROMs. Doesn't that depend on the size of the CD Rom? If 700 then it's a lot less than on 2 CDs? Whether or not that seems like a little or a lot depends largely on what you intend to do while connected to the Internet.

At this point we should probably make it clear that we're not advocating the downloading of music, films or other files via file-sharing network. Contrary to what you might think, there are plenty of perfectly legal sources of music on the Internet!

It should be fairly obvious from the numbers that you're hardly likely to exceed your monthly download allowance just by looking at web pages - unless you're still working on that speed-reading record...

The limit will only become a problem if you start to use the Internet to download (or stream) a lot of audio or video files or to download a lot of software. If you spend several hours of hours a day online, perhaps making use of online radio stations, or playing games, then it's surprising just how much of your usage allowance you'll get through.

Rule of Thumb: Generally speaking, we would recommend the following:

Avoid any deal with a monthly allowance of 1Gb (one gigabyte) or less, unless you're a very light Internet user or can only afford one of the cheaper deals.

Many deals currently available offer a 15Gb monthly allowance; for most people this should be more than adequate, although if you shop around you may be able to find a deal with an unlimited allowance for the same price.

If you think you are likely to want to download large numbers of files, or are a serious online gamer, go for a larger download limit - or better still a deal with no limit.

What Else Do I Consider, How Do I Choose the Best Broadband Deal for My Needs?

We've looked at connection speed and download limits, but what else do you need to consider when choosing from all the different broadband Internet packages?

Cost

Expect to pay a minimum of £10 per month for a package, more if you're going for one of the faster connection speeds. Make sure you factor in any one-off costs such as installation fees and any extra equipment you might need to purchase.

Your Existing Computer

Is your computer up-to-date? If it's less than 3 years old, there's probably nothing to worry about, but you should check that your computer meets any minimum requirements the provider specifies in their small print. If your computer is too old and slow, it may be unsuited to a broadband connection; in this case an upgrade may be necessary. And make sure your operating system is supported - your computer may be fine, but if you're still running Windows 95, it may be time to upgrade your software! If in doubt, Computer Services Southport can offer advice.

Extra Equipment

Will you need to install any extra equipment inside your computer, such as a network card? Will the Internet service provider send someone to set up your computer to work with the broadband connection, or will you need to make your own arrangements? Check the details of the deal carefully to make sure there are no hidden installation costs or potential pitfalls.

Support

How will the company respond if things go wrong? It's easy to overlook this factor when comparing deals from different suppliers, but you should give it some consideration. If your Internet connection stops working, how quickly will you be able to get through to someone who can resolve the problem for you? This is where word of mouth can really help - either from people you know or through reviews in magazines or online. If a company's reputation is made up of horror stories about hours spent on hold, or

engineers not turning up to install equipment, you may decide to take your money elsewhere.

Your Email Address

If you are switching from a dial-up Internet account to a broadband account and are changing companies, consider what will happen to your email address. If you use a web-based email provider such as Hotmail, your email will not be affected when you switch to broadband.

However, if your email is provided as part of your existing Internet package, you probably won't be able to take it with you to a new company. If keeping your old email address is important to you (perhaps you use it for business), you may be restricted to staying with your existing provider and any broadband deals they may have on offer. An alternative is setting up your own domain name and use it purely for email. Please call Computer Services for more information. 01704 888941.

Final Checklist

Once you've fully-digested this getting started guide, start searching for the best deals in your area or call Computer Services Southport for advice.

The Key Considerations:

What kinds of Broadband connection are available in my area?

What speed will I need?

Is a download limit important to me?

Other Things To Consider:

Are the connection, modem and installation included in the cost?

Do I want a 12 month contract or do I want to 'pay-as-I-go'?

What level of support is available from the company, and how quickly will they fix a problem?

Is my email address important to me? Do I mind that I might have to use a new address?

Finally, check the 'small print'. Does my computer meet the ISP's minimum requirements or will I need to upgrade my computer or software?