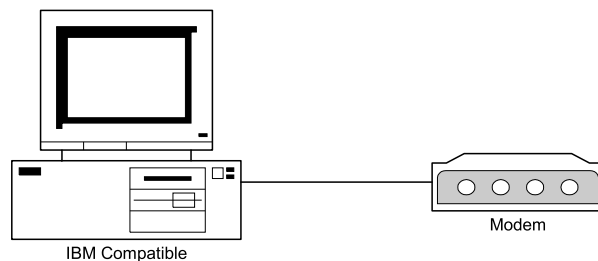


## Broadband and Home Networking: Part 1, Keep it simple

Our gadget guru, Roberto, has provided us with the first of a series of articles on connecting to the internet via broadband. If you have any questions after reading this erudite note, please contact him via [webmaster@chelfordvillage.com](mailto:webmaster@chelfordvillage.com) . This will help top up his job list and help prevent him spending even more money on bits of kit.

Roberto writes:

For all of these articles, I'm only going to describe ADSL broadband (Broadband via your phone line), as Chelford doesn't have a cable service provision.



(Simple diagram one PC, plus a modem)

If you have the choice and the connections on your PC and modem, go for Ethernet connections between them, it will make going to any of the later stages possible, as they all depend on Ethernet, or you might have to eventually replace your modem.

Some providers like BT still give you the choice; in fact their total broadband hub will support USB, Ethernet and Wireless. Other suppliers like Virgin have removed support for USB and will only support Ethernet.

If you want to use Ethernet, so you're ready for bigger and better things later, but your PC doesn't have it, you can buy an Ethernet card for up to £15, but it will involve opening your PC to install it. You can also buy usb to Ethernet adaptors, which use the usb connectors on your PC, don't require you to open the PC case up, but still allow you to connect to a home network. These can cost up to £40.

Most Ethernet cards are dual speed 10/100 mbps (mega bits per second), but most stuff works at 100mbps these days, 1000mbps (gigabit Ethernet) is now appearing, all the stuff on your network needs to be gigabit to achieve that speed, but the cards are tri-speed 10/100/1000mbps, so they'll work with existing kit until you upgrade everything.

Just to put the Ethernet speed in to context, most Broadband services currently run at between 2 and 20mbps, so the 10mbps Ethernet is already being overtaken by Broadband, but why go for gigabit, no broadband company is currently supplying those speeds. If you only have the simple set up shown about, that's perfectly true,

but as you'll see later in this series of articles, once you start adding other things to your network which can store or print files, you soon see the benefit of being able to carry out these activities quickly.

If you need to separate your modem from your PC, you could use PowerLine networking to achieve it, this was described a while back in [PropellerHead](#). Some PowerLine devices will extend USB as well, so you can extend those connections in the same way.

As soon as you connect your PC to the network, you need to protect it. As well as anti-virus software you should already add, you'll need to add anti-spyware and a firewall.

If you have kids (or a partner you don't trust!) you may also want to add parental control software to limit the sites that can be accessed.

You don't have to buy all these products separately though; most vendors in this market do suites, which have them all combined. (Just check the small print, as the details of exactly what they include does vary from brand to brand)

[http://www.kaspersky.co.uk/kaspersky\\_internet\\_security](http://www.kaspersky.co.uk/kaspersky_internet_security)

[http://www.symantec.com/en/uk/home\\_homeoffice/products/overview.jsp?pcid=is&pvid=nis2007](http://www.symantec.com/en/uk/home_homeoffice/products/overview.jsp?pcid=is&pvid=nis2007)

<http://uk.mcafee.com/root/package.asp?pkgid=274>

Don't forget you need to keep them up to date, so they can detect the latest threats, by connecting to the Internet regularly, and you'll need to pay a subscription for these updates at the end of the first year, (The first year's updates are normally included in the purchase price.)

It's also well worth making sure you keep your PC updated by using the windows update facility, as this also helps to protect your PC from threats as they are discovered.

<http://www.update.microsoft.com>

Security Updates for Apple Macs are similarly available:

[http://www.apple.com/downloads/macosx/apple/security\\_updates/](http://www.apple.com/downloads/macosx/apple/security_updates/)

Macs have had a reputation for not being as venerable as PCs, but as they become much more popular, they become a more interesting target for hackers and web criminals.

As people have got more used to paying a fee annually for renewal anyway, some vendors have started to offer this service as a pure subscription model, so you never own anything, it's a pure annual charge:

<http://www.symantec.com/content/en/uk/norton360/>

Even Microsoft have got in on this act:

<http://www.microsoft.com/products/info/product.aspx?view=22&pcid=c9c7dd57-636f-4820-9105-f6a5a0131859&crumb=catpage&catid=ea710cad-37b0-4975-bcd6-abfee19961df>