



For more details of our private lives are kept in databases around the world than Orwell ever dreamed of  
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Games

## Nothing's impossible, apart from joining a Windows network at home



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A long time ago, in a university fairly far away, a classmate and I were given a final-year project by our professor: see whether one could send high-frequency communications signals through the mains. After all, he suggested, if one could do so and usefully detect the signal, you could send data between rooms in a house. The fact that this was being presented as an undergraduate

project, rather than something you'd buy off a shelf in a shop, hints at how long ago it all happened.

Anyway, after some weeks – probably months – of warily blasting various frequencies over a mains voltage circuit containing a huge rheostat (to mimic the wiring of a house) and seeing what could be reconstituted, my colleague and I came up with our conclusion: it couldn't be done. High frequencies just dissipated in standard mains wiring; it was a hiding to nothing.

Which is probably why it's a good thing I moved into journalism, where one reports what other people have done. Today you can buy products for £25 which will indeed shoot the high frequencies necessary to run, say, an Ethernet network through your home. I tried a set from Solwise. It's very simple: start with a computer or Ethernet router (the latter these days often doubles as a modem for your broadband). Plug an Ethernet cable into the router. Plug the Solwise plug into the mains. Plug the Ethernet cable into it. Now go into another room, plug in another Solwise

plug, connect an Ethernet cable, and voila: you have a full-speed Ethernet link, as though you'd run a cable to the other room. Solwise also sells a wireless connector, which can take your wireless network into rooms your existing one won't reach, or give you a wireless network where none was before.

The joy is that, to use the magic phrase, it just works. Unlike so much home networking stuff which demands mystical information like MAC addresses for computers and passwords and hexadecimal, you don't have to install any software; your computer or other device just thinks it's plugged directly into the router.

I used this to play with Elgato's nifty EyeHome product, which lets you browse media files such as pictures, music and movies from a Macintosh on a TV interface. This, too, just works: once on the network, the EyeHome spotted my notebook and built up an index of files. I watched the first episode of Lost on a widescreen TV, and could concentrate on the narrative rather than being annoyed by pixellation or

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authenticating with some far-off server.

It led me to wonder quite what Apple, which pre-announced its to-be-renamed iTV media viewing product in September, actually intends to do. There's an Ethernet port on the iTV, but also the suggestion that it will be wireless. Some busy folk have uncovered what they think is an 802.11n chip – that is, a superfast wireless chip, capable of up to 540 megabits per

second – in some of the latest Apple hardware. Might the iTV use 802.11n to stream its "near high-definition" video?

Seems promising; yet two things don't quite tally. While 802.11n puts 802.11g (54Mbps) and 802.11b, aka Wi-Fi (11Mbps) into the shade, it won't be finalised before 2008. Apple could include 802.11n in its iTV, and then update it over the internet (as it did with its use of the earlier 802.11g specification). It would be a messy compromise, but could work.

But here's the real problem. To sell in any volume, the iTV will have to be cross-platform. Which means it will have to play nicely with Windows networking. In my experience, this never happens. Putting a Windows machine onto a network is a nightmare of impenetrable questions with multiple possible answers, all wrong. Auto-discovery might work, but 802.11n won't be on Windows machines for some time. You'll be better off with Ethernet – in other words, using something like those plugs to do something I thought impossible all those years ago.