Home Networking

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The modern home is often characterized by a hotchpotch of disparate electronic devices. These devices can through the shrewd use of basic hardware and software settings; be transformed into a powerfully integrated home computer network. Networking is a creative and efficient way to accomplish a variety of computing, communication and entertainment tasks from anywhere within the home or from the convenience of the back garden. The shared use of such devices will benefit the small business, the writer, the student or anyone for whom the PC plays an important role in their personal or professional lives. In these difficult times, it makes sound economic sense to fully exploit this relatively expensive equipment. Use of basic computer network concepts including Internet connection sharing; file sharing and device sharing will increase the usefulness and extend the life-cycle of even the most modest of electronic hardware.

The standard BT or Eircom wireless broadband modem in addition to its primary job of providing access to the Internet also doubles as a router. A router makes it possible to exchange files and documents and to share printer and other hardware resources over the network. The frequently unemployed printer languishing in the corner when shared can offer you the power of a small copy shop in your own living room. Through the use of some basic software settings on suitably configured devices, any member of the household can conveniently print documents from anywhere in the house or within approximately a 100Ft radius of the modem. The hefty scanner or Fax too, can also be used in this way. The abundance of unsightly cables will also be kept to a minimum with the optimum use of a wireless network.

Don't throw away that old PC or Laptop just yet! Why not turn it into a family entertainment Jukebox to store the family album, music collection or school project? With file sharing, the album and music can be enjoyed over the network.

With a little dedication and some inexpensive components, high fidelity music can be ripped from disc; wirelessly streamed and played back on that quality home stereo system. Those cherished vinyl albums and cassette tapes shouldn't be discarded either; use a *USB Audio Grabber* to transfer music from that old record or cassette player and permanently store it on the Jukebox. The digital camera or camcorder can be a convenient chronicler of family life but these fleeting snapshots can get lost either through neglect or their sheer number. Use the Jukebox to store these priceless memories and have them permanently available to any member of the household. In years to come, it might also be nice to look back fondly or in dread to that school project that seemed so daunting at the time. Needless to say, the home network needs protection from unwanted intrusions; this is easily accomplished by the installation of generally available and often free security software.

To your own amazement, you find yourself in one of those rarest of moods when you actually want to write up a page or two of the school magazine. So far so good, you locate and open up the magazine on your Laptop but soon realise that an important class photograph scan is stored on the PC downstairs. You could nip down and drop it on your USB stick but this would spoil the moment and besides big brother is hogging the PC again; probably on Facebook. Well you don't need to worry as you can continue with the real work as the scanned file can be shared out on the network and dropped into the magazine just as easily as if it were on your own Laptop.

You have been endlessly toiling on that Thesis or other substantial written work and for convenience and ease of access you have been saving the latest version on a portable storage device such as a USB stick. This makes perfect sense, because the inspiration to write can occur at the most unexpected of times and it is vital to take full advantage of these rare flashes by having nonstop access to the unending work. Be careful though as the USB stick can be easily lost or fatally damaged; avoid the devastation and heartbreak of losing months or even years of effort by using your home network to keep a backup copy of the document. Use simple freely available file synchronization software like *Microsoft SyncToy* to ensure that updates to the backup document are recorded and securely stored. In essence this software acts as a type of electronic briefcase where work in progress documents can be transported and modified for subsequent filing or storage.

The Notebook is an excellent travelling companion and due to its small size and light weight can even elude the Ryanair baggage bugbear. It is designed to provide most of what the mobile user needs for work and some pleasure pursuits but due to its small size lacks an internal disc drive. However, there are times when software or other important files are available only on disc. This is not a problem because the disc drive of any PC or Laptop can be shared out over the network. The software can then be installed or the files transferred to the Notebook using this dedicated network connection.

More novel uses of the network include but are not limited to NetTV where a special network adapter can be plugged into any electrical socket making it possible to stream live television from the Internet. The fun and challenge of multi-player games on the Xbox 360 and other gaming devices can also be experienced. If necessary, the range of the network can be increased by Signal Boosters, Wireless Repeaters or Multiple Access Points. Indeed, it's fair to say that there is almost no limit to which it can be expanded within the home or its reach extended outside the immediate four walls but this is a topic for another time. For now, don't lose that Thesis, keep those precious memories safe and use the network to its full potential for work and play.

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