

I would like to welcome readers to this new column – ‘Technology Exchange’. My name is Gavin. I’ve worked in various segments of the computer industry from NIMROD fighter plane simulators to fault finding instruments for overhead power lines. I can be reached at [techexchange@endhousesoftware.com](mailto:techexchange@endhousesoftware.com).

The primary aim of the column is to explain an aspect of computer technology in a relaxed manner, giving real-world examples with screen-shots if appropriate. I will also include pointers to where you can find more details if you wish to explore the topic further. The secondary aim is to promote the exchange of information between readers so I would like to invite readers to email their questions and tips in. Each week I will highlight a website or software utility that I have found to be useful in my work. So to this week’s topic – good practices.

Data stored on your computer is one of your most important assets and should be regularly backed up and usually stored somewhere away from the computer. Could you run your business if you lost all your data files? When you backup files you usually compress groups of related files into an archive – to take up less space on the backup media. The most common archive format is the ZIP file. WinZIP is the most common utility for handling ZIP archives (<http://www.winzip.com>).

Over the past few years there has been a great increase in people using the Internet – especially for email, chat and on-line gaming. Now more computers are permanently connected to the internet via broadband This has unfortunately lead to individuals and companies thinking it would be great fun to attack your computer either directly or by sending a virus attached to a piece of email.

The first line of defence is called a firewall – which creates a virtual barrier between your computer and the Internet. If you are running Windows XP and have all the updates including the ‘famous’ Service Pack 2, then you have a firewall ready to go. To make sure the firewall is enabled follow these steps: either double clicking the ‘Windows Firewall’ icon in the control panel or click the ‘Start’ button select ‘Run...’ and type ‘firewall.cpl’ into the box that appears and press RETURN. A window will appear, consisting of three tabs – General, Exceptions and Advanced (see figure 1). On the General tab select the On (recommended) option. The exceptions tab allows you to define applications that can bypass the firewall – use with care. Otherwise you will need to purchase a stand-alone firewall program, here I would recommend Norton Firewall (<http://www.symantec.com>).

Windows XP also offers a combined ‘security centre’ which shows the status of the firewall, automatic updates and virus protection (see figure 3). You can access this by double clicking the ‘Security Centre’ icon in the control panel.



Figure 1



Figure 2



Figure 3

The second line of defence is an antivirus program. This software will detect and remove any existing virus on your system as well as block any that try to gain access. Whatever antivirus program you use, you must make sure that you keep the virus definitions (these recognise the signatures of each virus and there are new virus being produced round the clock) up to date. This is usually done via a program option while you are connected to the Internet – some even display a warning message when the virus definitions are out of date. A new wrinkle to this is so called spyware. This type of virus will sit on your computer spying on your browsing habits. Effects of spyware can range from collecting details of the websites you visit to send you targeted advertising to recording your keystrokes as you enter a password (key logger). Recommend antivirus programs are Norton Antivirus (<http://www.symantec.com>) and AVG Antivirus (<http://www.grisoft.com>). AVG has a version that is free for non-commercial use. For spyware detection I recommend the Adware personal SE Edition from Lavasoft (<http://www.lavasoft.com>). This is also free for non-commercial use. For a small registration fee you can also purchase a licence for the real-time spyware detection module. I also recommend that you keep Windows XP update by making sure you download all the updates. See <http://windowsupdate.microsoft.com>. You can configure Windows XP to automatically download and optionally install updates by double clicking the 'Automatic Updates' icon in the control panel (see figure 2).

This week's recommended web site is Google Earth (<http://earth.google.com>). You can zoom in on any area of the globe from anywhere between orbiting heights of 37,000 miles to 40ft. At around 600 ft satellite images are replaced by high-resolution aerial photographs. Major cities are highlighted, and you can toggle roads, rivers, etc. The directions tab lets you enter any two locations anywhere on the globe and Google Earth will give you directions from one to the other. There are also links to articles, photos and video clips. The 3D modelling of the Grand Canyon is quite impressive. There is not enough hours in the day to explore all the possibilities of Google Earth. That's it for this week, please send any questions or comments to [techexchange@endhousesoftware.com](mailto:techexchange@endhousesoftware.com).