Radio Days – 2014-05-24

Tip of the Week – Trial Version Or Free?

During the week I had a call from a client who could not display an attachment which came in an email. Every time he tried to open it he saw a message which stated that his trial version of Adobe PDF had expired one day ago. He was having difficulty understanding that this meant that he had downloaded a version which would only work for a certain time (in this case for 30 days) before expecting him to cross its palm with plastic money.

Trial Versions

Trial versions are just that: the full version of a commercial program which you can use for a short time to see if it fills your needs. Most new computers come with a trial version of an anti-virus program in the hopes that you will continue to use it when the trial period has expired, thus making money for the manufacturer.

There are many other programs which come as a trial version and expect you to pay for them when you need them. I often see a program which states that it will do all sorts of wonderful things (things like clean up an enormous number of supposed errors in your computer) once you have paid for it. This is often the result of a feral mouse-click from someone who either was not thinking or who just cannot control their mouse easily. These program, often called nuisance-ware, are the result of clicking on a button which says *Click Here*.

There should be a large red warning flag not to click here!

Free Versions

The usual programs which I advise you to use in my cheat sheets are the free versions of full programs (like CCleaner or Defraggler) or the only versions of other programs (like Picasa). I never recommend trial version without explicitly saying so. Having said that, I have known some people who have mistakenly downloaded the trial version of a commercial program and then accused me of being in the pay of the manufacturer. This usually happens because the button to download the full version is more prominent than the button to download the free version (for obvious reasons!).

The solution for this problem is easy: RTFS! (Read The Flamin' Screen!). This way you have at least a chance of getting what you want and expect.

The Birth Of The WWW

There have been a number articles recently which stated that the birth of the World Wide Web was twenty-five years ago on 20 May. The official starting date, 20 May 1989, celebrates a meeting of a small group of people trying to find a solution for a massive problem facing researchers at CERN (*European Centre for Nuclear Research* or *Conseil Européen pour la Recherche Nucléaire* in French). The problem facing researchers was how to find all the information held in the computers at CERN once they had returned to their home university.

There were various problems, but they all amounted to the one thing: the information was held in a number of formats on a number of computers and was completely hidden from everybody who did not physically work at CERN.

The solution is called the *World Wide Web*.

One thing which seems to confound people is the difference between the internet and the web (as the world wide web is now called). The internet is a set of computers (both servers and clients) and the software which links them and the people who use them. The web is a service which uses the internet to work. There are other services, email and telephony being the best known, which also use the internet as the medium to move data around.

The Building Blocks

There are a large number of building blocks which, together, make up the *internet* and, sitting above the internet, the *world wide web*. There are the technologies which allow for small amounts of data to be sent as packets across telephone lines and to be reassembled at the receiving end. There are technologies which allow users to request pages from a server. There are technologies for pages to be displayed on a screen and to be read aloud.

These building blocks are like the skills which you use when you drive a car. Each skill is needed, but it is not until you put them all together that they become really useful. A skilful driver will use all the driving skills, like being aware of all the other cars around his or her car and knowing how to accelerate and brake, signal and steer, to arrive safely and comfortably at the desired destination at the desired time. Another skill which can be useful at times is knowing how to solve the problems which arise.

Here are some of the building blocks of the world wide web.

TCP/IP

These two protocols (a protocol is a set of rules which control how things are done and is often used in diplomatic circles so that an argument does not get too far out of hand) are the basis of the internet, and thus all online communications. In computing use it details the design of a method to accomplish some important task.

The task which TCP/IP is designed to accomplish is the quick and reliable transfer of data over any type of network. This has the result that it does not matter how you connect to the internet (using copper cable as in ADSL, using wireless as in the mobile phone network or using WiFi from your internet router to your computer, your tablet or your phone): your data arrives intact and complete whichever transport mode you use.

Another important task is to maximise the capacity of the lines which carry internet traffic. If a direct connection was needed for each pair of connected computers (as was needed when modems dialled into the server when I started using the internet in the mid-1990s) the Google could not exist as it would be too expensive. TCP/IP gets over this by using packets to carry the traffic.

Each packet only carries a small portion of the total message and the host and receiving computers, between them, are responsible for ensuring that all packets arrive and that they are assembled in order so that an email arrives correctly and a web page displays in all its glory. The best part about using packets is that it does not matter which wire is used to transport them. One of the ways that this is achieved is to move error checking and correcting out to the two computers at each end of the connection.

When thinking of packets, think of driving your car. If you had to book all the roads needed for the duration of your trip to school or work so that you were driving the only car on those roads, the number of people who could use the roads would fall dramatically. However, by sharing the roads, everybody can use just the portion of the road that they need, and this portion of road moves along with them. This protocol is the backbone of the internet.

HyperCard

HyperCard is an old technology created by Apple in the period when Steve Jobs was in limbo working at NeXT: his replacement for Apple after he had been sacked by the board.

It allowed everybody to create what are now called apps. Each app consisted of "cards" which could hold all sorts of data: images, text and check boxes are some of these data. A card could also contain small fragments of code so that a user could click on a part of a card and the appropriate action would be carried out by the app. Cards could be linked together, and you could navigate between cards by clicking on the links. Thus HyperCard is the precursor of the hyperlink, those underlined links on which you click to get from one web page to another.

HTML and CSS

To make it easier for web designers to design and create webpages two new technologies were needed to make the HyperCard program work in the web. Over the years computer people have realised that, to make life easier for everybody, it is necessary to separate the content of a document or web page from the presentation of that content.

In a web page the content is provided by the HTML (HyperText Markup Language). If you display the content of a web page (often using *Ctrl + U*) you will see the HTML which makes up that web page. On some pages the HTML will be obvious but on others you will not be able to make head or tail of it. This is, however, the content of that web page.

To make it easier to change the look of a web page another technology is used: CSS. CSS is used to change the layout of sections of a web page by using Style Sheets (the SS of CSS). The C stands for Cascading, and this means that you can create your own style sheet which will override the style sheet created by the web page's author. You style sheet will then have a higher priority than the style sheet in the web page.

Browsers

For the world wide web to work these technologies needed to be brought together. The way to do that is to use a program called a browser. This program browses the web and shows pages on your computer's screen using the HTML and CSS sections of the web page. The first browser was called Mosaic, which later became Netscape and, even later, became Internet Explorer.

Browsers use the networking protocol TCP/IP to connect your computer to the server which holds the pages that you want to display, then display the results on your screen. This, on the surface, is a simple task but much goes on behind the screens.

There are various browsers for Windows computers, with my favourite being Chrome.

The World Wide Web

Tim (now Sir Tim) Berners-Lee is generally credited with being the creator of the world wide web while he worked at CERN. This invention has exceed even his optimistic hopes, as it is now responsible for help people do so many tasks so much more easily than could otherwise be done.

He took the concept of HyperCard, with its collection of links, and married it to the transport protocols which had been created to link computers together. The net result is the time-wasting demon which now rules our lives and, at times, seems to keep us apart.

How many so-called friends do you have on Facebook?

Further Information

Nothing this week