Radio Days – 2013-10-05

Discussion - Small Computer Safety

Small hand-held computers – smartphones and tablets – are often overlooked when thinking about online safety. My talk on 14 September about a show on ABC TV looked at the sorts of potential problems which you can get into when using small computers. During that talk I stated that the *Four Corners*' show on ABC TV, *In Google We Trust*, had pointed out that some apps did not take security as seriously as they should. This segment also pointed out that one specific app sent all sorts of details over the user's WiFi network in the clear. The details sent included the user's name and address, their phone number and all the details of the credit card used to pay for the purchase.

As a result of that talk I received an email forwarded from a listener stating:

> *Just listened to your computer segment, and couldn't believe my ears. ALL banks have a secure network to do internet banking. IF you look at the address line, instead of leading with http:// it will read https:// and be green in color to show it is a secure address. Also banks guarantee it is secure.*

This is, of course, correct but it completely missing the point that I was trying to make. The problem is not with the bank's website but, in this case, with a purchase made with a credit card from an app on a smartphone. This information was NOT sent using the bank's website but using the app. Before the show went to air the particular NFL club's app was corrected to ensure that this did not happen in future.

There is another problem with this email. The assumption that the web address shows up in green on a smartphone's screen is wrong, at least for my android phone. There is a padlock visible in the address bar and the address does start with *https://* showing that it is a secure site.

This, of course, does not mean that most people know what that means. In my experience most people do not know that there is a difference between *http* and *https*. To clear this matter up, *http* stands for *HyperText Transport Protocol* and *https* stands for *HyperText Transport Protocol Secured*.

Again, for this sort of information to be of any use the average person needs to be aware both of the difference between http and https and then to notice the address bar in their browser.

Safety

My comment at the time (*Unsafe Surfing*) was that there was potential for unscrupulous people to intercept this transaction and start the process of identity theft. This is a serious crime which has left some people with a major fight on their hands to prove that they are not responsible for debts which have been taken out in their name.

This process, of clearing your name, can take years. It can also be fruitless, and thus leave a person whose identity has been stolen with a crippling debt hanging over their head. This crippling debt has, as was recently reported, also been incurred by people who believed that the person that they met on the internet was the love of their life. This was the subject of last week's talk under the heading of *Scams: Money & Sex*.

I urge you to think carefully before you use an app on your smartphone or tablet not to do so over a WiFi network. This sort of network is difficult enough to secure from a surfer close to your home, in the case of a home WiFi network, but it is absolutely impossible to stop people leeching your transmission in a public location like a free WiFi hotspot like those at hotels and restaurants.

This, of course, is but one part of the problem.

Anti-Virus

There is another problem, and that is the possibility of a virus. People have told me, on many occasions, that Macs are inherently better than Windows computers because Macs cannot get a virus. This is yet another of the many furphies that I meet in the course of my working day.

There is no such thing as a completely safe computer, whether the computer is a smartphone, a tablet or a laptop or desktop computer. All operating systems are extremely complex things and it is impossible to secure them completely. It is for this reason that I recommend that you get an anti-virus program for your smartphone or tablet.

My preferred anti-virus program for both my desktop and laptop computers is Kaspersky. This program has consistently topped the charts on both the *AV Comparatives* and *AV Test* websites. It is also one of the cheaper ones, and cost seems to be a major problem for so many people.

Unfortunately I do not know enough about Windows smartphones or iPhones, so users of these phones will have to make their own enquiries.

Updating Your Phone

I do believe that it is best to ensure that your computer, whatever its size, be kept up-to-date. This is because tests have shown that computers with the latest updates installed are much less able to be compromised by a hacker than computers which do not have all the latest updates installed.

This is because the reason for creating updates for programs is so that any vulnerabilities can be closed. This is, in my opinion, the best reason for making computers of all sizes, and their programs, as secure as possible. The best way to ensure that programs on a normal Windows computer are up-to-date is to use a program like Secunia PSI. This free program will check all the programs on your computer and let you know which ones need updating. It is also available for android phones so will help you keep all the programs on your phone up-to-date better than most other methods.

When I check websites using my android smartphone I often see downloads for android programs. I have never been sure if that is because these programs are only available for android phones or because the website knows that I have an android phone. Both of these options are possible, because a website can easily check to see what operating system and what browser is being used by the device which is accessing that website.

If you use a Windows phone or an iPhone please let me know what you see when you visit sites like Secunia.

Further Information

Unsafe Surfing	www.tobybainbridge.com/rd-2013-09-14.pdf
Scams: Money & Sex	www.tobybainbridge.com/rd-2013-09-28.pdf
Kaspersky	www.kaspersky.com
AV Comparatives	www.av-comparatives.org
AV Test	www.av-test.org
Secunia PSI	www.secunia.com