

Security Matters?

At the moment there is NO security! This is a simple statement that I have made many times and as yet no-one has challenged me and offered examples of systems that are truly secure. My point is that today the human is specifically involved in initiating and operating the security systems. We are all very busy people and inherently lazy. The answer to this malaise is for the security managers to impose more and more arduous requirements. These requirements require more application and the human finds methods to circumvent them..... An excellent example of a vicious circle or self fulfilling prophecy!

That my own case as an example: at the moment I have 43 different computer systems (I have just filed my Self Assessment forms with the Inland Revenue over the Internet, which added yet another system). Each of these systems requires a different alpha/numeric string as a password – and each password has to be changed every month; for “security reasons you understand”. I have a simple solution to the pain I feel – I write all the passwords down in the back of my paper cheque-book. Every so often I tear out the last cheque and destroy it, and as if by magic there is a new password writing area automatically presented! There is no security in such a system, even though I occasionally write them backwards!

And the one thing that drives me crazy; as a legitimate user of a system, having put my user ID, password, Domain details etc, etc, etc into the system – I am confronted by a screen that tells me that this is a secure site and if I am not authorised to use the site I must press “exit” now. Well, if I was a hacker, not only has the system told me that I have just won a major prize, but it also rang the bell to alert me!

We must become rational about security. We all lock the doors to our homes – but realise that the locks can be picked. We all happily hand over our credit cards for payment of goods and services – and exactly where did that card go in the restaurant last night when the waiter absented himself for 25 minutes? But these are in the physical world in which we feel comfortable and knowledgeable. But in the electronic world where we are devoid of our usually senses – there is great fear...

With the greater ability to move information, and the desire for instant applications, we are going to need greater security systems – which must be simple, easy, and workable. Ringing my telephone banking service today, Name, Initial, Date of birth, Memorable address, forth character of your password.... There is probably more security in the human to human interaction in the speed and confidence of reply than in its actual content. But machines are not that clever...

I do see, in the near future, the security matters being removed from us humans all together. Much work has been done recently on Fingerprints (but the police have criminalized these)

Looking at the Future Slightly Differently

hand prints, length and angle of fingers of the splayed hand, veins in the back of the hand, or in the retina, voice prints etc. If we are to use these biometric systems then they must be unobtrusive and convenient – I have spent the whole of my life trying not to gaze down a laser beams!

In the near future I see my security details being applied to a Smart Card. By placing this card into a machine, and yes I do see computers, phones and even TVs having integrated Smart Card readers, I will be able to transmit my identity as well as my personal preferences conveniently. This will leave the human interaction to be used for the service transaction not introduction.

In the further future I see the use of Iris recognition. Apparently the bars in the coloured part of the eye are a great signature of the body able to give a recognition to error rates of 10^{24} – which is about the number of atoms in the Earth! And the whole measurement can be made at a distance without my being actively involved with the process. Soon machines will look at us, recognise us, and apply adequate security at all times, in all systems, at all levels.

Then we will have security levels we can trust in the electronic world.