

UnderstandIT

From **MAY DAY CONSULTING LIMITED** in association with **Facilitators International LLP**

A publication designed to inform and enable businesses to understand the implications, costs and advantages of using Information and Communications Technology. Distributed through Chambers of Commerce.

RIPA COMES INTO FORCE....

The third section of the controversial Regulation of Investigatory Powers Act 2000 came into force earlier this month (October). The Act was passed in 2000, and was designed to stop investigations being hindered by advanced communications tools.

The third section, which has just been activated, includes the power for any one of a number of named authorities to order that an encryption key be disclosed. The disclosure order can be placed on anyone who is believed to hold the key, so that the contents of computer files, email messages and other electronic communication that have been protected with some form of encryption technology can be investigated.

One difficulty that has been pointed out by some critics of the act, that there is a defence for not disclosing a key. For example you can claim that you have forgotten the key. It would be very difficult to prove that you have not forgotten it, unless the investigators are mind-readers. In practice, the court would have to decide based on evidence about whether the key is still in use elsewhere for example. This could prove extremely difficult. It might also be difficult if the hard disk or computer has been in the investigators hands for a number of years whilst investigations proceed and eventually come to court.

For those with the interest, and perhaps stamina, the full RIPA act can be seen here:

http://www.opsi.gov.uk/acts/acts2000/ukpga_20000023_en_1

BLUETOOTH TECHNOLOGY

Bluetooth, the short range radio communication technology is another subject that we have discussed often in articles in *Understand IT*.

The expansion in the use of Bluetooth technology is now much in evidence and is set to increase even further, but there are worrying signs on the horizon.

Currently, it is possible for mobile phones to communicate very effectively with Bluetooth. If you own an Ipod or other MP3 player, then you can also connect a Bluetooth adaptor (commonly known as a “dongle”) to the player and the music will play on Bluetooth enabled speakers. Many Hi-Fi systems are now available that use Bluetooth for a similar purpose – avoiding the need to run lengthy cables around your living room to connect the player to speakers.

In the area of computing, printers memory card readers, laptops, desktops, handheld computers, digital cameras and of course mobile phones can all be interconnected for downloading or synchronising digital content between two devices, whether it be music, messages, photographs or even video.

Although the advantages of this technology are obvious, the proliferation of inter-connected devices is bringing with it complications. To begin with, the method of connecting two devices can be quite daunting for the technophobe. The requirement to make a device “discoverable” and to “pair” devices before they can communicate is not always straightforward.

“Pairing” just means that the two devices are configured to recognise each other, which is important in a world where there are Bluetooth devices everywhere. You would not want your Bluetooth hands-free ear-piece to connect to the mobile phone of your fellow-traveller on the bus or train, would you?

An industry standards organisation – the Bluetooth Special Interest Group is currently trying to make things simpler and is scheduled to publicise the latest version of the Bluetooth protocol – Version 2.1 early next year. The new version will allow automatic “pairing”, and introduce “touch transfer” – this just means that if you place a digital camera close to a computer or mobile phone, the two devices will automatically pair and do what is required – transfer photographs. The problem, of course, is that you will need to purchase new devices that support the new standard to take advantage of these features.

Finally, there are different types of Bluetooth communication – called profiles that are placed in the different types of Bluetooth-enabled devices. They are not always compatible, and therefore it is important to know which device will inter-operate with another. The industry is currently publishing a series of icons to be placed on the packaging of Bluetooth devices that will indicate whether devices are compatible. However, manufacturers are not duty-bound to use these icons, and many of the larger manufacturers do not. The unwary might therefore find themselves with two devices that do not communicate at all!

The object lesson here is to talk with your supplier before purchasing any devices with Bluetooth capability.

If you require further advice on the use of Bluetooth, then call Alan Finch on 01224 697457, for help.

CURRENT ANTI-SPAM ACTIVITIES

We have discussed the issue of SPAM email a number of times in Understand IT. The IT industry has for some time been struggling to develop and agree methods and implement the necessary technology to defeat the scourge of SPAM email.

Email spoofing - the forging of an email address that appears to come from an individual or a company in order to get users to have confidence in opening an email message - is one of the biggest challenges facing both the Internet community and anti-spam technologists today.

Without verification of the authenticity of the sender and the knowledge that messages can be traced, you can never know for certain if a message is legitimate or forged. It is therefore necessary for Service Providers to continually make educated guesses on behalf of their users on what to deliver, what to block, and what to quarantine, in the pursuit of the best possible user experience. The same dilemma faces the end user, in instances where SPAM mail is delivered unwittingly.

A recent technology proposal – DomainKeys now offers the possibility of easing this decision making process. Once it is established, it will give email service providers a method of verifying both the domain* of each email sender and the integrity of the messages sent (i.e., that they were not altered during transit). Once the originating domain is verified, it can then be compared to the domain used by the sender in the "From:" field of the message to detect forgeries.

If the message is a forgery, it will not be delivered. If it is genuine, then the domain is known, and it will have a recognised and accepted profile that will be used uniformly by anti-spam systems, shared between service providers and even made available to end users.

This ability to have verified domain profiles will be invaluable to large well-known companies that would like to use email to communicate with customers - banks, utilities, and ecommerce services, as it can help them protect their users from "phishing attacks". "Phishing" is the fraudulent solicitation for account information, such as credit card numbers and passwords, by impersonating the domain and email content of a company to which users have entrusted the storage of this information.

Many industry bodies are currently working hard on completing the DomainKeys Identified Mail (DKIM) specification that will soon be ratified as an Internet standard. Hopefully this will not take too long. We will then all be able to forget about those annoying SPAM messages that clog up our inboxes.

A Domain is the name given to a single computer or a group of computers on the Internet. A typical domain name is www.understand-it.co.uk

SKYPE ENABLED MOBILE PHONES

Mobile phone manufacturers are now beginning to produce mobile telephones that not only have Wi-Fi communication built-in but now also the ability to use Skype to make phone calls over the Internet for free.

Three, the UK mobile service provider owned by Hutchison Whampoa are about to launch their new mobile phone that has Skype software built-in. Whilst there are a number of conventional telephone instruments available for use with your computer or broadband router, that have Skype software installed, this is the first mobile phone to offer the facility.

Unfortunately, the 3Skypephone does not include Wi-Fi communication, but it is 3G compatible and can provide access to the Internet. The advantage of this feature is obvious – you can make calls for free to any other Skype user in the world.

The launch of the 3Skypephone is a radical departure in the industry where they have steadfastly refused to include VOIP (Voice Over IP) features in a traditional mobile phone, since it could obviously impact the revenue they receive from paid calls.

Three have limited its use to calling other Skype users. You cannot therefore use it to call ANY number in the world via the Skype-Out feature provided by the Skype service. Similarly, you cannot use the Skype-In feature either. However, this is a major step in providing less expensive ways of making calls from your mobile phone.

In the future, as the market moves on, it is clear that this move will motivate the industry to be more realistic and offer features that will encourage more users to use their networks and services – reducing cost!

The biggest loser in this area is likely to be the operators of fixed land line telephone services – British Telecom principally in the UK.

One drawback of the 3 offering is that whilst the new mobile phone can be used to "roam" in any country (except the USA, since it is only dual band), the Skype facility can only be used in countries where 3 have a network - Austria, Italy, Sweden, Denmark, Australia, Hong Kong, and Ireland.

You can find out more here:

<http://3skypephone.com/english/index.html>

We wish to acknowledge with thanks that some of the material contained within this publication has been sourced from Computer Weekly, PC Pro, BBC and other reputable sources..

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