

## Information Security September 2009

**David Cripps** 



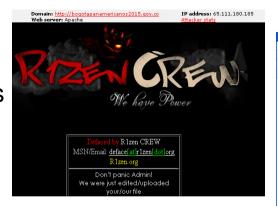
Out of the Ordinary®



### **Bad Guys**



Script kiddies hobby and peers







**Hacktivists** 



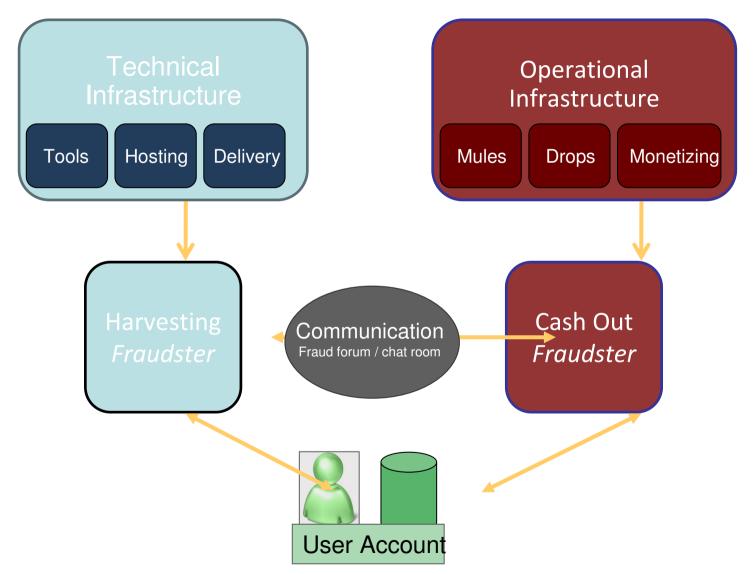
Organised and cyber-criminals financial gain



**State Sponsored** 

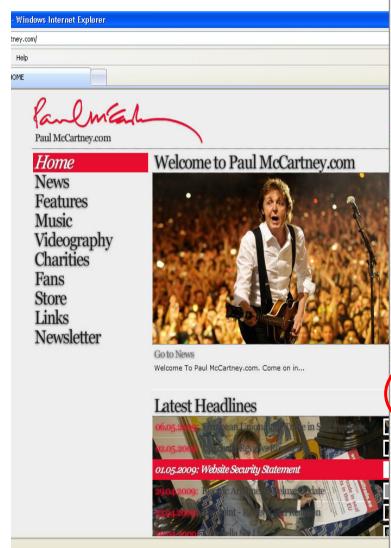


## Fraud Eco System (choose your career)





### "Drive by" download



### 01.05.2009

# Website Security Statement

Following the statement, which appeared on this site on the 19th of April 2009, we have investigated further into the security breach/backing incident on the paulmccartney.com website between the 4th to the 6th of April inclusive. As soon as we became aware of the security breach we disabled it and since then have been working with our technical experts and the relevant law enforcement agencies so as to minimise any impact.

No personal details of any users visiting the paulmccartney.com website were/are held on the server hosting the site.

We recommend that all users who visited the site between the 4th to the 6th of April inclusive carry out their own computer virus checks, by using an up-to-date virus checker, to ensure that their computer has not been infected with any malicious software. Users should be vigilant and be aware that hackers may use malicious software to obtain personal information from the user's computer and may use such information to open accounts and/or purchase goods; accordingly, users should sheck their bank accounts and personal statements frequently.

If a user discovers that their computer has been infected or that any personal information has been compromised they should alert their credit card companies and banks immediately.

www.paulmccartney.com

## The bad guys after passwords...

Page last updated at 16:12 GMT, Thursday, 9 July 2009 17:12 UK

### Police to probe phone hack claims

The police are to examine claims that a huge mobile phone hacking operation was launched by the News of the World, targeting thousands of people.

The Guardian says the Sunday paper's reporters paid private investigators to hack into phones, many of them owned by politicians and celebrities.

It is alleged details were suppressed by the police and the High Court.

Prime Minister Gordon Brown said:
"This raises questions that are
serious and will obviously have to
be answered."



"Thousand" of celebrities and politicians were allegedly targeted

## The bad guys after passwords...



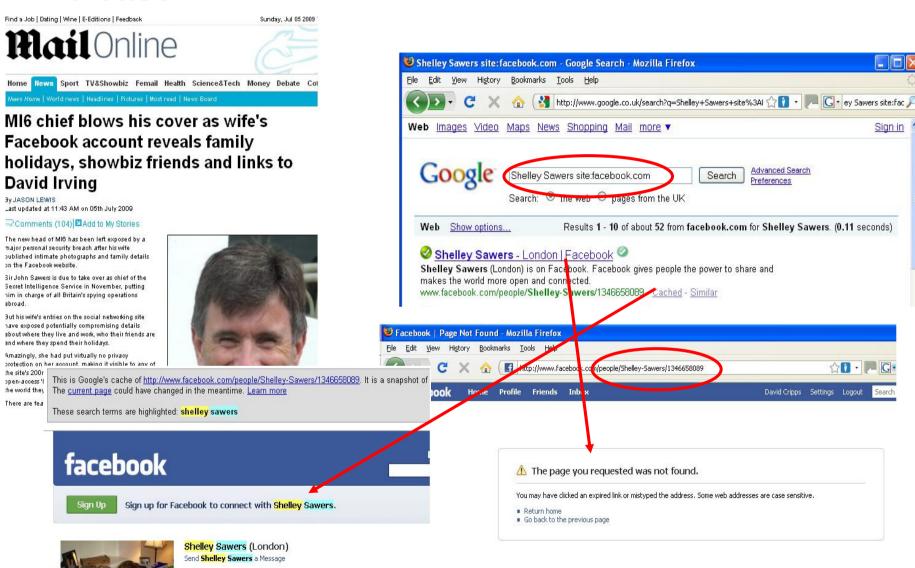
Daily Telegraph's website hacked 700,000 e-mail addresses and user passwords leaked

7th of March 2009



The Hotmail account of UK MP Jack Straw was compromised and an email sent to everybody in his address book. The email claimed that Jack had lost his wallet whilst on charity work in Africa and needed \$3,500 to get home

### MI6 case....

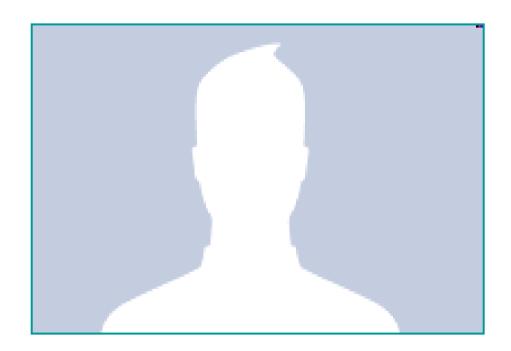




Not the **Shelley Sawers** you were looking for? Search more »

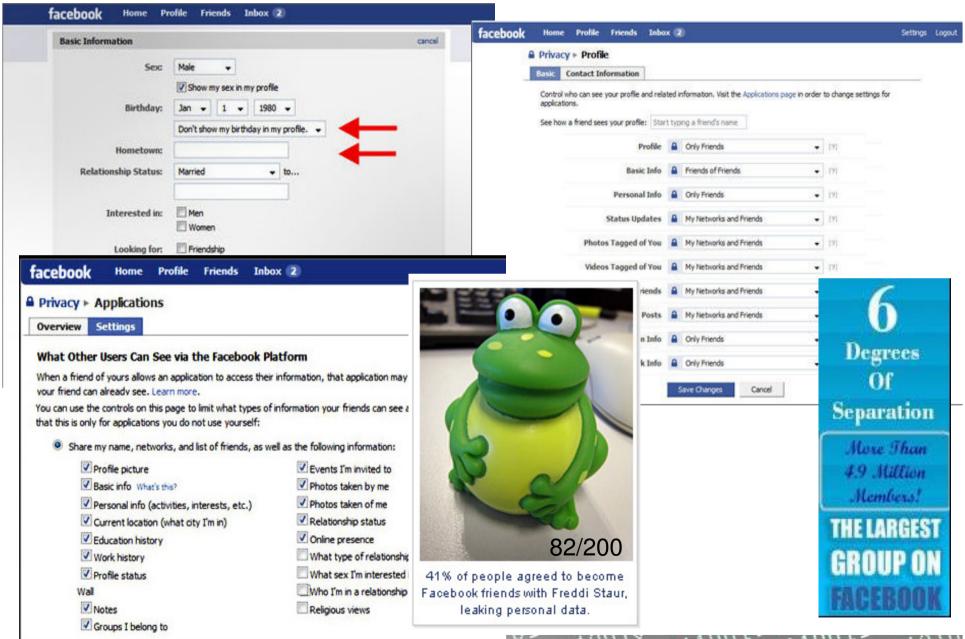
## Social Networking and information leakage





540 in Investec Group67 in Investec Employees48 in the ex-Investec Group (A self help group that understands what it was like)

# Keep you own privacy ---- only 20% change these



### "OMG I HATE MY JOB"



OMG I HATE MY JOB!! My boss is a total perwy wanker always making me do shit stuff just to piss me off!! WANKER!

Yesterday at 18:03 · Comment · Like



Hi Guess you forgot about adding

me on here?

Firstly, don't flatter yourself. Secondly, you've worked here 5 months and didn't work out that i'm gay? I know i don't prance around the office like a queen, but it's not exactly a secret. Thirdly, that 'shit stuff' is called your 'job', you know, what i pay you to do. But the fact that you seem able to fuck-up the simplest of tasks might contribute to how you feel about it. And lastly, you also seem to have forgotten that you have 2 weeks left on your 6 month trial period. Don't bother coming in tomorrow. I'll pop your P45 in the post, and you can come in whenever you like to pick up any stuff you've left here. And yes, i'm serious.

Yesterday at 22:53

Write a comment...

## "ma job it pointLESS"

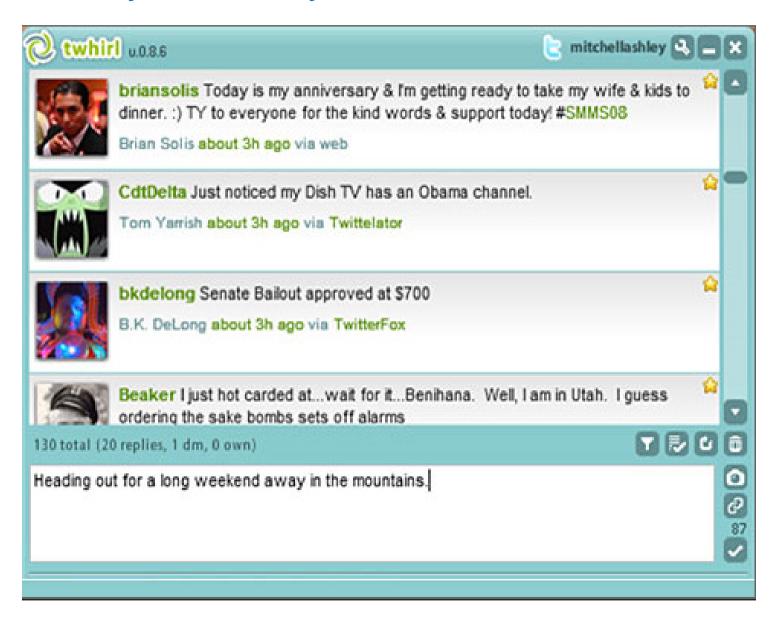


"disrespect and dissatisfaction shown undermined the employer-employee relationship and made it untenable".

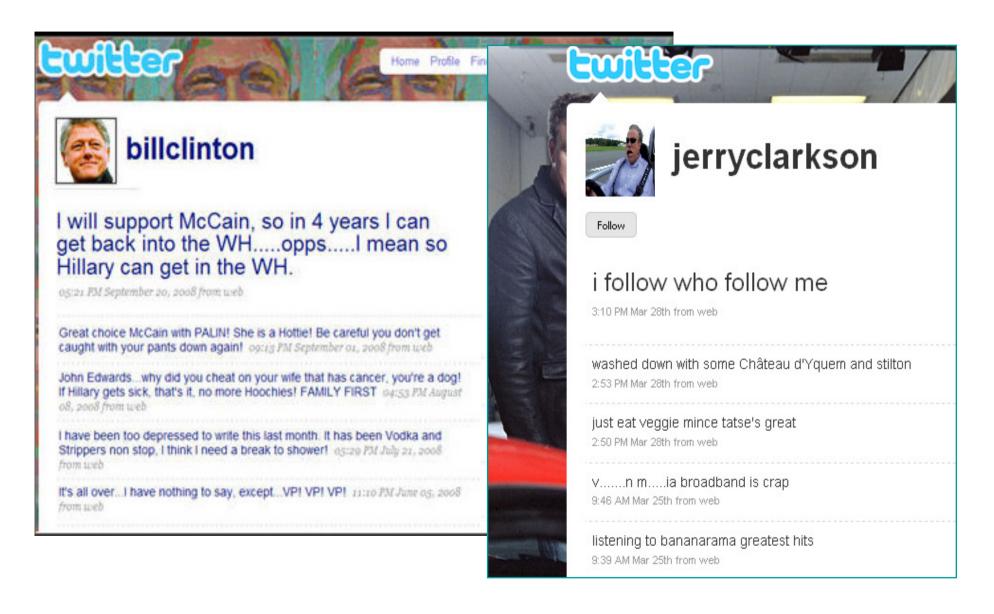


implied conditions of employment – conduct that may bring employer into disrepute; any defamatory or negative comments made about your employer in a public forum including conduct outside of work

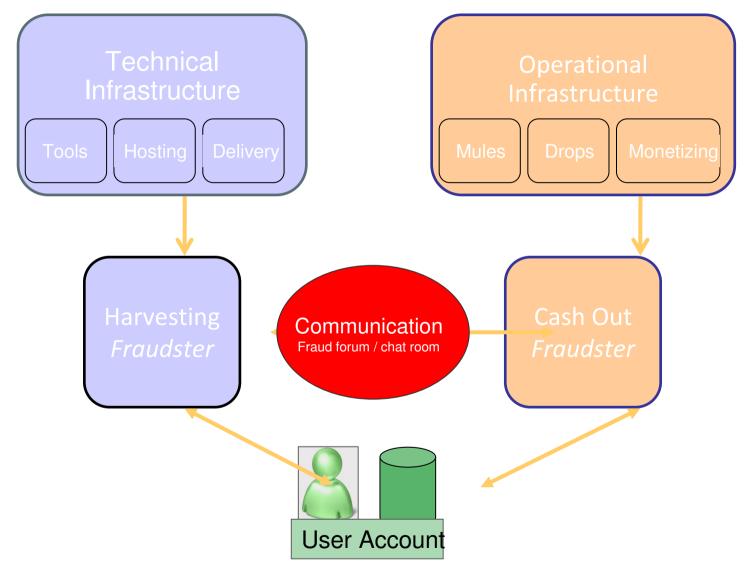
### Advertise you're away



## Know your contacts



## Fraud Eco System (or choose your career)

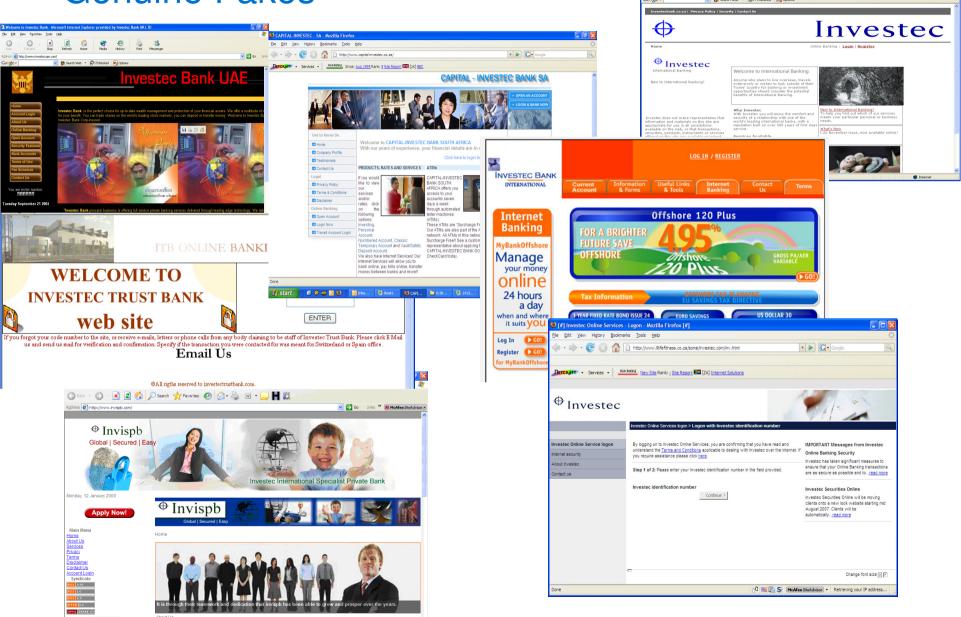




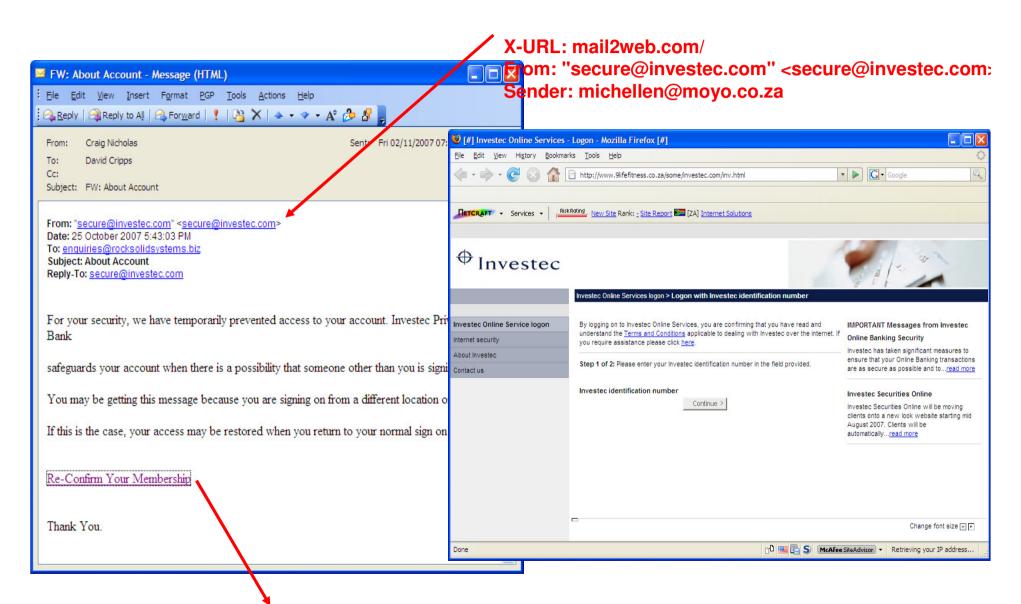
## Fraud Eco System (or choose your career)

```
<Sonic> I have Bank Accounts...Fresh US Covs...Fresh Uk Covs...discount if you buy in Bulk......have 1888/2888[Dead
  FullZ].....i accept payments via E-GoLD and WU(only if 100$+)
⟨El Validos⟩ DTA I
(El Validos) 4826 (eLeCtRiC MaStEr)
                                           i'n good wu drop ny share
* bRAndY has ioine
                             he is drop from pakistan don't trust pakistans pol
                 SaaDi
* Free In Upload
* ChanServ sets mo
                 he always rip like HubaHuba
* DTA selling US
<eLeCtRiC MaStEr>
 rio like Hubak...
<reptilez> ( Selling ) Fresh Business
* versace selling eu cvv2.
                                                   mala. msr206. Accept e-gold or wu!
* IceEyes slaps reptilez around a bit with a large trout
(IceEyes)
               ****ed up
* reptilez slaps IceEyes around a hit with a large trout
* SaaDi i'm good wu dr
                                   i'm qood wu drop my share is only 20 %
                       SaaDi
<reptilez> i know.
<IceEyes> no more such t
                     <eLeCtRiC MaStEr> he is drop from usa don't trust american ppl :D
* The Judge I need
 can pick up any WU in
(reptilez) some people's he always rip like G. Bush
<IceEyes> try smth else ■
<reptilez> i still qot logins though..
<reptilez> valid ones :/
<IceEves> huh
<IceEyes> :)
<eLeCtRiC MaStEr> :D
<eLeCtRiC MaStEr> eheh
<eLeCtRiC MaStEr>
                     are dead
<eLeCtRiC MaStEr> :D
<eLeCtRiC MaStEr> theu call
* Free Im Uploading Scams On Hacked Hosts For Long Time Guaranted - Payment Egold Pm me About Prices !
<reptilez> ( Selling ) Fresh Business
<eLeCtRiC MaStEr> ;p
* El Validos Cashing out -PINS- ! Msg me for FAST cashout and bins list(502-502)!!! Also cashing E-GOLD(my share 402)
* DTA selling USA/CANADA Fulls. e-Gold(mails fresh) payment e-gold only.
                                                                    on vour free to pm if at all vou of anv of this(PLS NOT
(Frodo) Looking for band
 SELLERS) RIPPERS KEEP OFF..?/;)
* bestfriendsxx has quit IRC (Ping timeout)
* versace selling eu <eLeCtRiC_MaStEr>
                                             i'm good wu drop my share
                                                                                            is only 15 %
* allacat has joined #ccpower
```

### Genuine Fakes

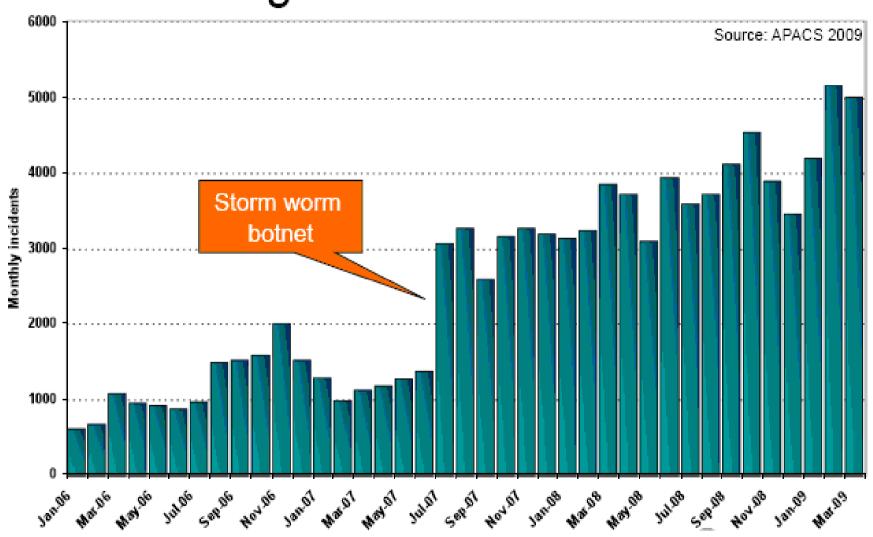


### Investec's first Phish – November 2007



www.9lifefitness.co.za/some/investec.com/inv.html

# Phishing incidents – UK banks



### SARS scam

# SARS South African Revenue Service

Tax Notification

After the last annual calculations of your fiscal activity we have determined that you are eligible to receive a tax refund of ZAR 1484.40.

Please submit the tax refund request and allow us 48 hours in order to process it.

A refund can be delayed for a variety of reasons. For example submitting invalid records or applying after the deadline.

To access the form for your tax refund, clic

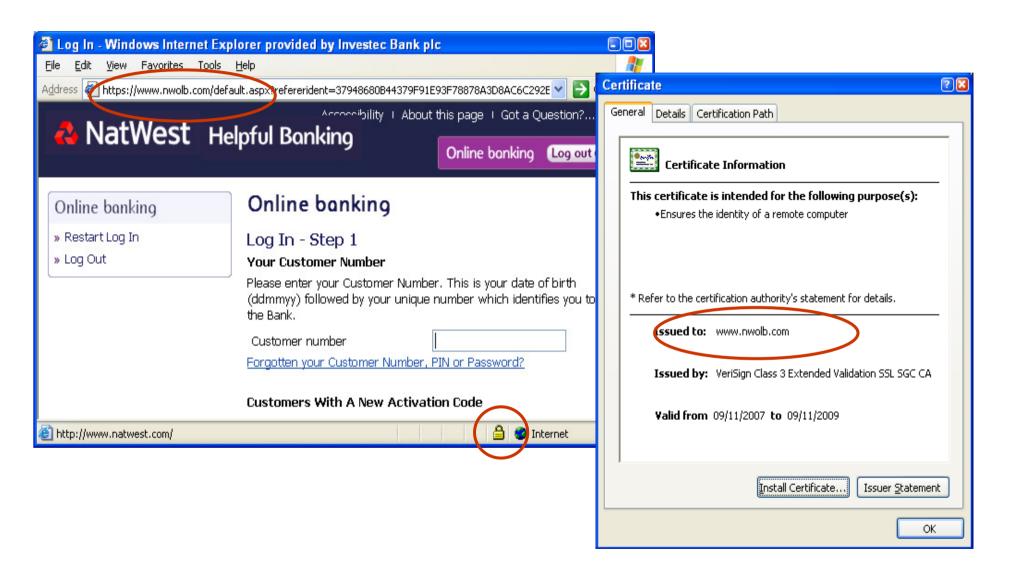
Regards, South African Revenue Service (SARS)

Document Reference: (92054568).

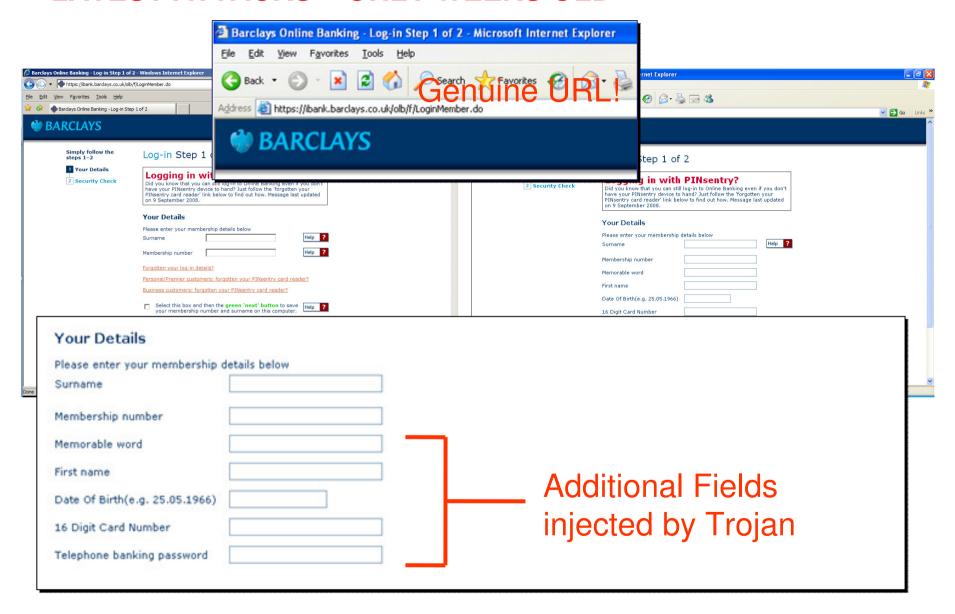
Individual	User - Tax Refund Form			
Title Initials Firstname	Surname		1000	
Please enter a Debit/Credit Card where refu  Bank Card Number Card Expiration Date Mooth		Jan Park		
Card PIN Y	thy is my PIN required?	# 2 <sup>578</sup>	11/6	
Please select submit to continue getting yo	or refund.	oat 1		

All information, content and data on SARS websites and associated facilities, including but not limited to software, hyperfinks and databases, is the property of or iccessed to SARS and is protected under applicable South African laws. Unauthorised usage of contents or instruction stars professionally professionally in the property of the site of the s

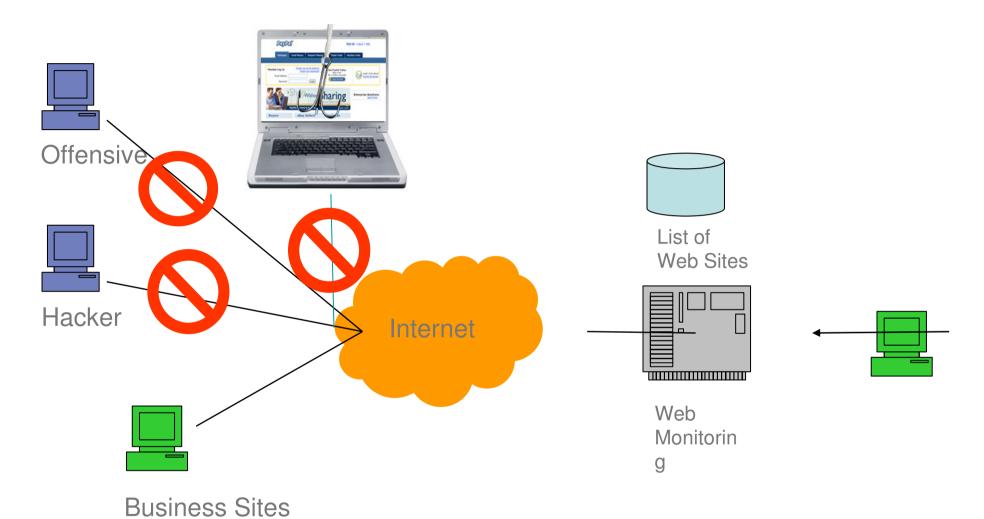
### padlocks



### LATEST ATTACKS - ONLY WEEKS OLD



# Monitoring



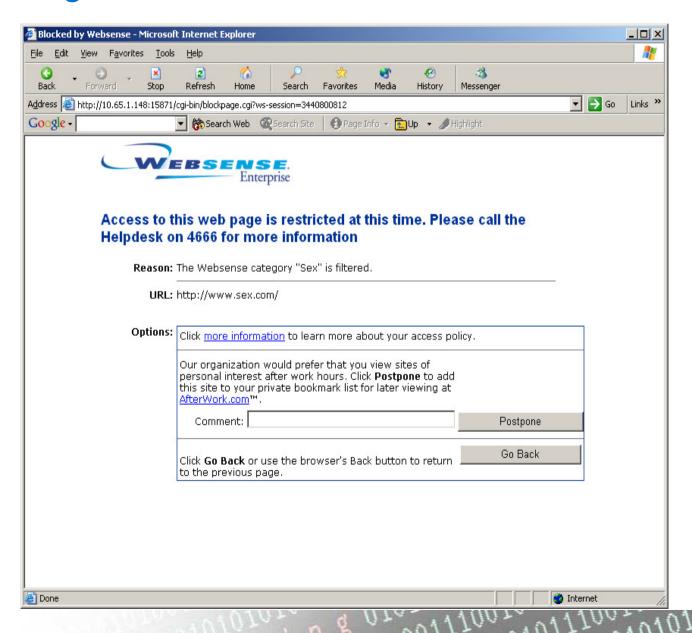
# The majority of sites on the Internet are pornography related --Some of them are easier to find than others...



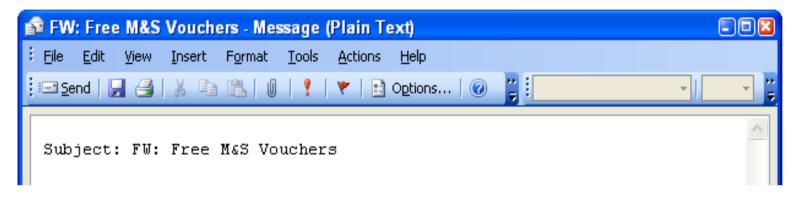
www.whitehouse.gov

www.whitehouse.com

### **Blocking**



### Denial of service – being a good cyber citizen



# Resulted in Persimmons receiving 200 emails / minute

```
>with your vouchers attached.
>
>They will contact you through your e-mail address.
>
>Please mark a copy to:
>
>Andy.curran@persimmonhomes.com
```

### Information leakage ---- it's not IT

# TIMESONLINE

From The Sunday Times

April 26, 2009

British spy loses secrets in a handbag



It happened when the MI6-trained agent left her handbag on a transit coach at El Dorado airport in Bogota, Colombia. Intelligence chiefs were forced to wind up operations and relocate dozens of agents and informants amid fears the device could fall into the hands of drugs barons.

### Information leakage ---- it's not IT

Last Updated: Wednesday, 14 February 2007, 16:16 GMT

E-mail this to a friend



Printable version

### R12,8M

### Nationwide fine for stolen laptop

The Nationwide Building Society has been fined £980,000 by the City watchdog over security breaches.

The fine follows the theft of a laptop from a Nationwide employee's home which contained confidential customer data.



Nationwide security procedures were found to have failed

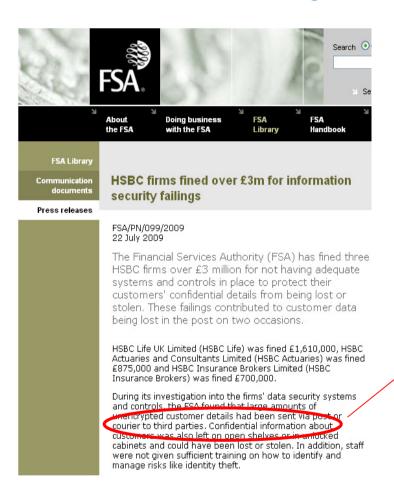
The Financial Services Authority (FSA) found security was not up to scratch after the man had put details of nearly 11 million customers on his computer.

The FSA also found that the Nationwide did not start an investigation until three weeks after the theft occurred.

### Financial crime

The FSA will not reveal exactly what was on the laptop as it has still not been recovered.

### Information leakage ---- it's not IT



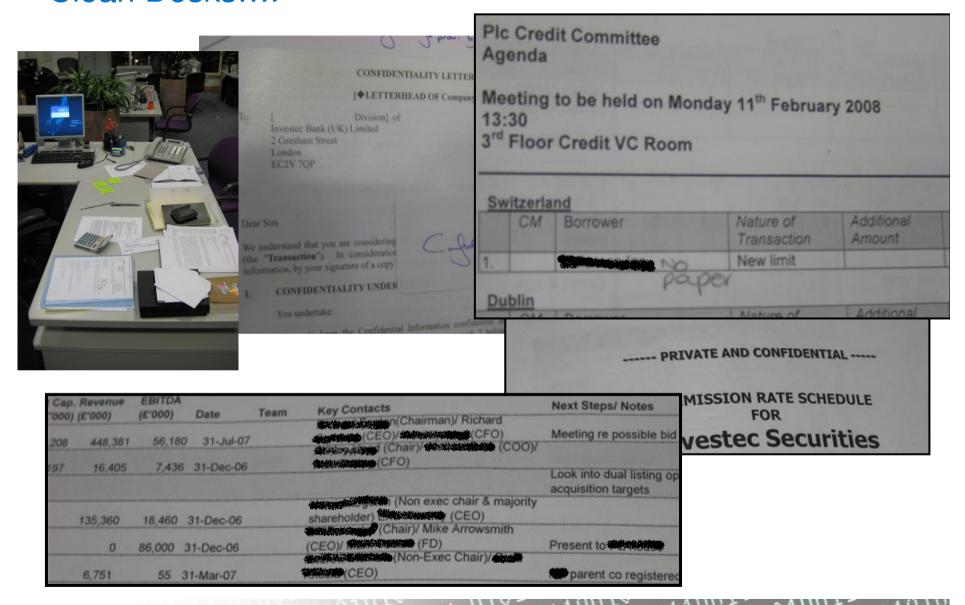
### **HSBC £3.2M / R42M**

"found that large amounts of unencrypted customer details had been sent via post or courier to third parties. Confidential information about customers was also left on open shelves or in unlocked cabinets"





# Information leakage ---- it's not IT Clean Desks....



### Data Protection Act / Protection of Personal Information Act





Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data

Strasbourg, 28.I.1981



- 1. Obtain and process data fairly and lawfully
- 2. Store data for specified and legitimate purposes
- 3. Data is adequate, relevant and not excessive in relation to the purposes for which they are stored
- Data is accurate and, where necessary, kept up to date;
- 5. Data is preserved in a form which permits identification of the data subjects for no longer than is required for the purpose for which those data are stored.
- 6. Data is processed in line with your rights
- 7. Data is kept secure ("appropriate security measures shall be taken")
- 8. Data is not transferred to other countries without adequate protection

### Payment Card Industry





### guardian.co.uk

News | Sport | Comment | Culture | Business | Money | Life & st

News > World news > United States

# Government charges Miami man with largest-ever US credit card theft

Federal prosecutors accuse one-time government informant of trying to gain access to 130m accounts.

### Hackers target TK Maxx customers

Hackers have stolen information from at least 45.7 million payment cards used by customers of US retailer TJX, which owns TJ Maxx, and UK outlet TK Maxx.

In a statement to US watchdogs the firm said it did not know the full extent of the theft and its effect on customers.

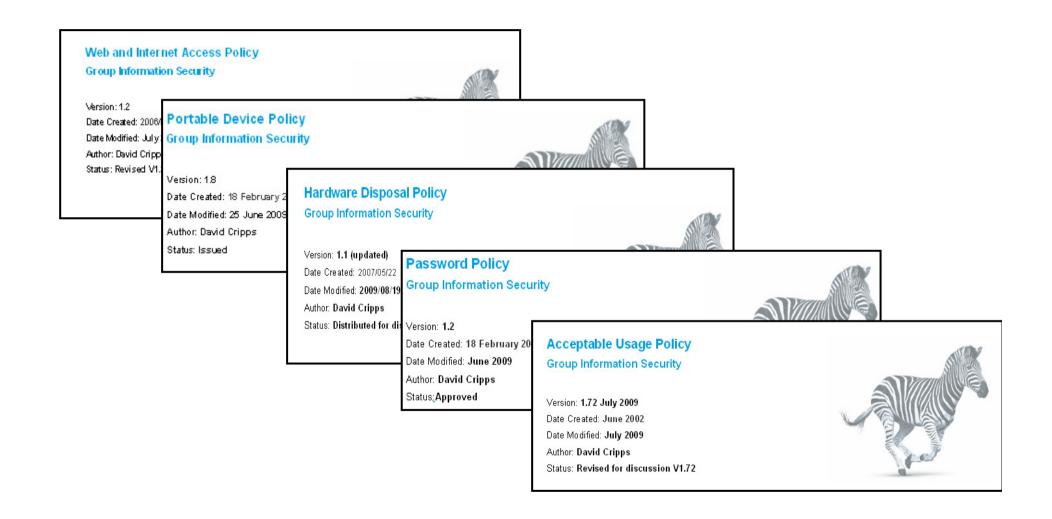


Stores in the US, UK, Canada, Ireland and Puerto Rico are affected

TJX added that the security breach may also have involved TK Maxx customers in the UK and Ireland.

- Build and Maintain a Secure Network
- Protect Cardholder Data
- Maintain a Vulnerability Management Program
- Implement Strong Access Control Measures
- Regularly Monitor and Test Networks
- Maintain an Information Security Policy

# Policies – Acceptable Usage / portable devices / password / Web...



### Acceptable Usage

- At all times, protect the confidentiality of client, counterparty, business and IT information obtained in the course of performing all Investec functions.
- At all times, respect the legal rights related to "intellectual property" belonging to Investec as an organisation and to non-Investec organisations/persons.
- Use Investec computers, networks and other information resources for legitimate business purposes, however, limited, reasonable personal use of email and the internet is acceptable
- Don't bring Investec into disrepute
- Use appropriate passwords (8 characters)
- Physically protect hardware (screen savers/locks/
- Clear desk (don't leave sensitive information where it can be copied/stolen)
- No confidential information to leave building unencrypted
- Don't access or send offensive, obscene, pornographic or harassing material
- Don't access social networks, chatrooms, blogs, Webmail, etc from work
- Don't bypass our controls (3G, GotoMyPC, Modems, iBurst, etc)

### Common Sense

	<b>Encrypt</b> al	I sensitive	and client	information	off site
--	-------------------	-------------	------------	-------------	----------

Use strong passwords and don't share

Unsolicited emails and links in emails

Think! – will this look bad if seen by a client?

Report incidents and losses to service desk 3355

No unauthorised installations

Do not trust anybody who phones

**Backup** 

Be careful what you publish on the Internet

### Security applies at home as well!

### Free Anti-virus programs

Free Anti Virus
 AVG
 http://www.free-av.com/
 http://free.grisoft.com/

**Personal Firewalls** (some free or pay extra for upgrade with more functionality)

- ZoneAlarm: http://www.zonelabs.com Free/ \$40

http://www.zonealarm.com/store/content/dotzone/freeDownloads.jsp

Black Ice <a href="http://blackice.iss.net">http://blackice.iss.net</a>

Kerio <a href="http://www.sunbelt-software.com/Home-Home-Office">http://www.sunbelt-software.com/Home-Home-Office</a> Free/\$10

### **Combined products:**

http://www.symantec.com/norton/index.jsp

£40.

http://www.mcafee.com/myapps/is5/default.asp

### **PC Cleaners**

SpyBot S&D http://www.safer-networking.org/Free

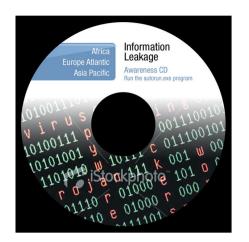
Adaware
 Also check out site
 http://www.lavasoftusa.com/products/ad\_aware\_free.php Free
 www.grc.com to test your existing PC to see how vulnerable you are.

#### **Browser Blockers:**

WeBlocker

### **Update you PC**

http://windowsupdate.microsoft.com



£40

# Questions?

David.Cripps @ Investec.co.uk