Computer Evidence 101 for Defence Lawyers



Ajoy Ghosh







Agenda

Every click you take, they'll be watching you

The law has a new high-tech stool pigeon reporting criminal activities, writes Amber Hunt.

- Introduction
- Choosing an expert
- Aspects of computer forensic evidence
 - Reliable
 - Relevant
 - Sufficient
- Data recovery
- Mobile p

ot an iPhone in your bag! Chances are you may be storing even more personal information than you realise, and some of it could be used against you if you're ever charged with a crime. A burgeoning field of forensic study deals

with irnones specifically because of these popularity, the demographics of those who own them and what the phone's technology

former hacker, Jonathan Zdziarski decided figures. Clearing our user histories isn't positioning system applications. enough to clean the device of that data, said law-enforcement agencies might need belp retrieving data from the devices.

that terned into Forensics. That, being tapped by head Howards nationwide to t information is s AUSTRALI

IOSHIIA BRUCE'S MOTHER

Thieves ensure raising goes off with bang

Two years ago, as iPhone sales boomed, a 50 million iPhones, according to company mapping functions as well as various global

The free application Urbanspoon is John Minor, a communications expert and primarily designed to help users lucate





"Graphic images" ... one of the

FACEBOOK management failed repeatedly to reveal the activity of an international child persography syndicate operating on their site and ignored continuing admissions by one of the rings Australian members

The failure by the social networking site was uncovered dueng a federal police-led interminimal investigation of the syndicate which had been using

knew of the existence of these pages and even went so far as to remove the profiles," said the director of the AFP High Tech

Crime Gentre, Neil Gaughan. But despite closing down the pages after finding slegal matertal. Pacebook did not conner. police. Mr Goughan said.

Tanehook deactivated the online accounts of the initial suspeers hur there were indications that within bours, the groups were re-forming again."

ject Ocean, was set up by the AFP in March. By base it included the FRI in the US, the Child Explaintion Online Persection Centre in

1 am fearful, but

Britain, the Mouraed Po name of may have be involved in

British-based man police say is the ringleader was due to face an English court overnight.

All II are accused of creating to convey their concerns, and

information to police.

Federal police also contacted a Facebook official in Australia

However, a Sydney public relacommony seat the Herald anotes

TRACKING YOUR EVERY MOVE

- Every time an iPhone user closes the built-in mapping application, the phone snaps a screenshot and stores it.
- ▶ iPhone photos are embedded with tags and identifying information, so photos posted online might include GPS co-ordinates of where the picture was taken and the serial number of the phone that took it.
- ▶ Even more information is stored by the applications themselves, including the user's browser history, which could prove useful to police.



tories and text messages most useful in hour-

Apple doesn't store that cache very wide cases. But Zdziarski, who has helped securely. Zdziarski contended, so someone federal and state law-enforcement agencies with expertise could recover months of typ-

Why I'm up here

Lecturer:

- Law Schools at UNSW and UTS
- Santa Clara Law School
- ☐ Beijing Management College of Politics & Law

Expert witness in court:

- ☐ Civil: contract, evidence, reliability, authorship, times
- □ Complex criminal: terrorism, identity theft, fraud, stalking, data leakage
- Content: child pornography, terrorism, spam, harassment, vilification
- □ Serious criminal: homicide, rape, corruption

Litigation coach:

- □ Lawyers, judges, prosecutors
- International jurisdictions including alternative legal systems eg. ICC, China
- Preparedness specialist

15+ years experience in information security, investigations and policy:

- □ Police, Corporate & Consultant
- □ Chief Information Security Office at Logica
- □ Senior IT Security Professional for 2009



Best practice:

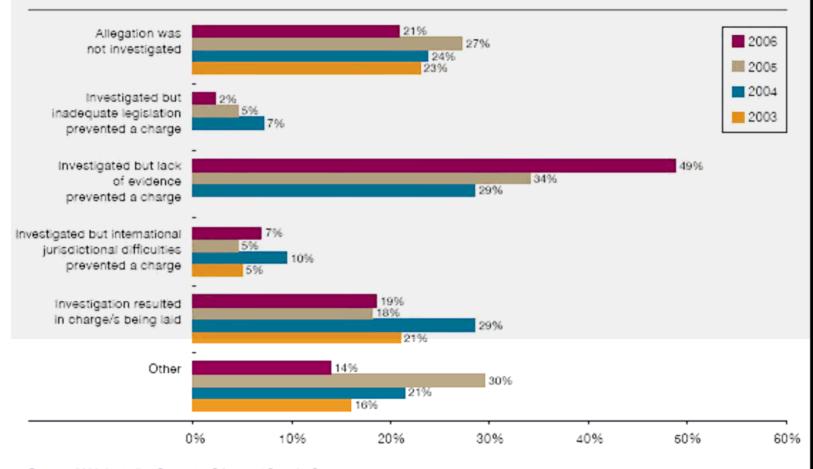
- □ Author of HB171 Guidelines for the Management of IT Evidence
- Co-author HB 231 Information Security Risk Assessment Guidelines
- □ Currently working on ISO N9735 Guidelines for identification, collection and/or acquisition and preservation of digital evidence
- ☐ CISSP and iRAP accreditations



HB171: Guidelines for the Management of IT Evidence (above)
HB231: Guidelines for Information Security Risk Management (below)



Where electronic attacks or other forms of computer crime were reported to an Australian law enforcement agency, what was the outcome?



Source: 2006 Australian Computer Crime and Security Survey 2006: 43 respondents/11%, 2005: 44 respondents/24%, 2004: 42 respondents/18%, 2003: 61 respondents/28%, Note: In 2003, "lack of evidence prevented a charge" and "inadequate legislation prevented a charge" were not options for this question.