

## Using smartcards to minimise identity fraud

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IIR National Fraud Summit  
22 March 2005, Sydney

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## Phishing in the USA

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Gartner Research May 2004:

- 57 million US consumers affected
- 3% provide personal info
- 19% click through

[http://news.com.com/2100-7349\\_3-5234155.html](http://news.com.com/2100-7349_3-5234155.html)

<http://www.wallstreetandtech.com/showArticle.jhtml?articleID=26100381>



## Phishing in Australia



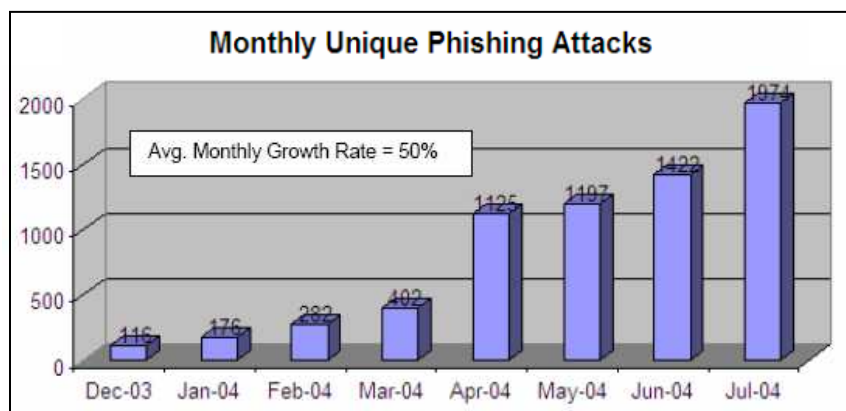
*“Non-lending losses also increased [in the second half] with higher levels of internet phishing and cheque fraud.”*

**A Big Four bank Financial Results FY04, October**

## Phishing globally

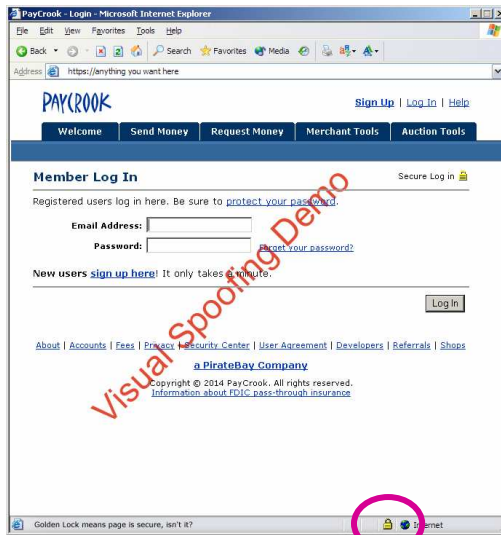


### Phishing Attack Trends Report July 2004



[www.antiphishing.org/APWG\\_Phishing\\_Attack\\_Report-Jul2004.pdf](http://www.antiphishing.org/APWG_Phishing_Attack_Report-Jul2004.pdf)

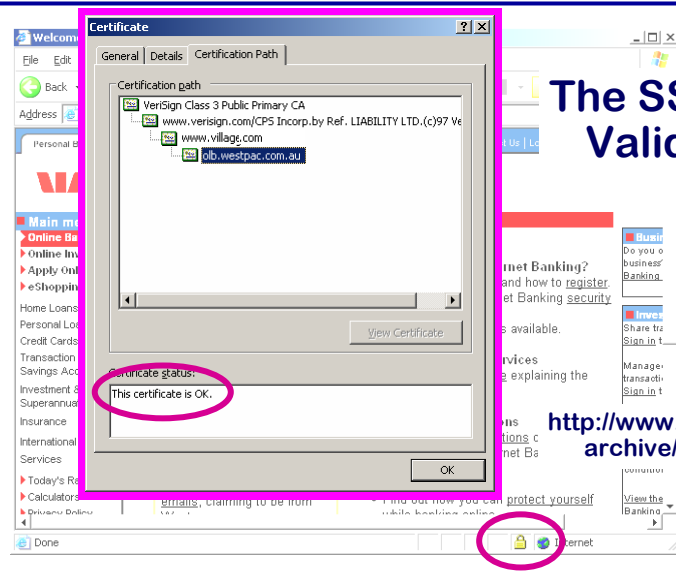
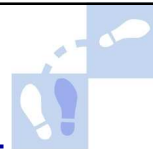
# Advanced phishing



Visual Spoofing

[www.docuverse.com/visualspooof](http://www.docuverse.com/visualspooof)

# The padlock is broken!



The SSL Path Validation flaw

<http://www.securityfocus.com/archive/1/286290>

## To fix phishing?

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*“Single factor, replayable authentication is no longer viable to prevent unauthorised access to valued or sensitive online accounts”*

**Graham Ingram (AusCERT) APEC eSecurity Task Group, Singapore September 2004**

## Education?

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*“I know that it sounds very basic, but education is the silver bullet”*

**Hani Durzi, eBay, New York Times, 7 March 05**

*“The biggest problem in solving phishing is that it is not a technology issue”*

**Network World Web Apps Newsletter 31 Jan 05**

*“Making consumer identity protection successful is not a technology issue”*

**Richard Hanson, VP RSA Security.**

## Australian Bankers Assoc.

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### **Online bankers face double layer of security**

Sydney Morning Herald 9 March 2005

*“The chief executive of the Australian Bankers’ Association, David Bell, said an industry standard requiring all banks to use two methods of identifying internet customers would be introduced later this year.”*

## US Government approach

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- **Level 4 remote authentication**
  - 2 factors: “hard token” unlocked by pwd/bio
  - Must resist eavesdroppers
  - Must resist man-in- the-middle attacks


*“Only practical solution today uses PKI”*

**Bill Burr, Manager Security technology**

**US National Institute of Standards and Technology**

[http://asia-pkiforum.org/feb\\_tokyo/NIST\\_Burr.pdf](http://asia-pkiforum.org/feb_tokyo/NIST_Burr.pdf)

## Where are the smartcards?




**UK cardholders**

Total: 42 million cardholders\*

The Programme reached the Dec 2004 target of 36 million chip and PIN cardholders (76% of total)

\* More than three in four cardholders have a chip and PIN card  
[Total number of people who hold at least one credit or debit card]




**UK tills**

Total: 660,000 tills

The Programme reached the Dec 2004 target of 636,000 tills upgraded to chip and PIN

\* Eight out of ten retailers have upgraded their tills to chip and PIN



**Chip and PIN**

*December 2004*  
**36 M cardholders**  
*(i.e. >3/4 of Britons)*  
**77 Million cards**  
**636,000 terminals**

<http://www.chipandpin.co.uk>

## Smartcards generally

*“We are working with a number of major customers to implement smart cards ... minimizing the weak link associated with passwords. Microsoft itself now requires smart cards for remote access by employees ... over time we expect most businesses will go to smart card ID systems.”*

**Bill Gates January 2003**  
[www.microsoft.com/mscorp/execmail/2003/01-23security.asp](http://www.microsoft.com/mscorp/execmail/2003/01-23security.asp)

