

# Update on Whois Studies



## **Current Status**



**Carnegie** Mellon University CyLab

- Final GNSO-commissioned Whois studies now completed, awaiting public comment
- Whois Privacy & Proxy Abuse Study
  - Performed by National Physical Laboratory, UK
  - Public comment period closed 13 November 2013
- Whois Misuse Study
  - Performed by Carnegie Mellon University, USA
  - Public Comment after Buenos Aires



## NPL's Whois Privacy & Proxy Abuse Study: Summary of Findings & Public Comments



### Study tested two hypotheses

*#1: "A significant percentage of the domain names used to conduct illegal or harmful Internet activities are registered via Privacy or Proxy services to obscure the perpetrator's identity."* 

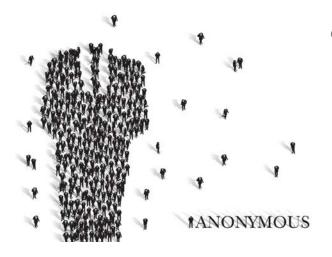
### ➢ Finding: TRUE

#2: "The percentage of domain names used to conduct illegal or harmful Internet activities that are registered via Privacy or Proxy services to obscure identity is significantly greater than the equivalent percentage of domain names used for entirely lawful Internet activities."

> Finding: ONLY PARTLY TRUE

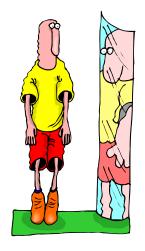


## NPL's Whois Privacy & Proxy Abuse Study: Additional assessments to enable comparison



Accuracy of Whois phone numbers for domain names used to conduct illegal or harmful Internet activities. Finding:

"Domains registered for illegal/harmful activity rely on multiple ways to hide contact details, but an above-average number of legitimate domains also do not provide accurate contact information (phone number)"



 Whois for domains used to conduct certain lawful/harmful activities, chosen to mirror bad actors Note: This study was NOT designed to assess privacy/proxy use across ALL domains



## NPL's Whois Privacy & Proxy Abuse Study: Scope of Activities Studied

#### <u>Studied</u>

- Phishing
- Advanced Fee Fraud and other complex scams
- Unlicensed Pharmacies
- Typosquatting
- Child Sexual Abuse Image websites
- Domains appearing in Spam (SURBL)
- Domains associated with Malware (StopBadware)
- Domains subject to UDRP Process
- Lawful/Harmless websites chosen to mirror above

#### Did Not Study

- Spam beyond Phishing/Fake Pharma
- DoS or DNS Cache Poisoning
- Intellectual Property Theft beyond Typosquatting, Fake Pharma, Spam
- Media Piracy
- Identity Theft
- Harrassment or Stalking
- Different use rates by country
- Differences between privacy vs. proxy service (and vice versa)



## NPL's Whois Privacy & Proxy Abuse Study: Summary of Findings

	Work package	Maliciously registered?	Usage of privacy or proxy services
WP6.4	Legal pharmacies	no	low
WP6.3	Law firms	no	low
WP1t	Phishing: third parties	no	low
WP6.6	Typosquatted domains	no	average
WP8	StopBadware domains	some	average
WP6.2	Executive search consultants	no	average
WP1c	Phishing: compromised sites	no	average
WP6.1	Banks	no	high
WP5	Child sexual abuse image websites	yes	high
WP1m	Phishing: malicious registration	yes	very high
WP9	Domains subject to UDRP	some	very high
WP7	SURBL domains	mostly	very high
WP6.5	Adult websites	no	very high
WP2	Advanced Fee Fraud	yes	extremely high
WP4	Typosquatting	yes	extremely high
WP3	Unlicensed pharmacies	yes	extremely high



## CMU's Whois Misuse Study: An Update



 Analyzes the extent, nature, and impact of harmful actions taken by those who misuse Whois contact information by

(1) surveying registrants, registries, registrars, experts and law enforcement;

(2) conducting experiments to measure Whois contact misuse

• Hypothesis tested by CMU: Public access to Whois data leads to a measurable degree of misuse – that is, to actions that cause actual harm, are illegal or illegitimate, or otherwise contrary to the stated legitimate purpose.

## CMU's Whois Misuse Study: Preview of Findings





- Although survey responses rates were low
  - 29.8% of surveyed Registrants reported Whois email address misuse
  - 12.3% of surveyed Registrants reported Whois phone number misuse
  - 29.8% of surveyed Registrants reported Whois postal address misuse
- No other type of misuse was reported or measured at a statistically-significant level
- CMU's draft report will contain further details regarding significance of gTLD, domain price, registrant type, antiharvesting on Whois Misuse



## Next Steps



- ICANN staff to summarize and analyze public comments to NPL's study (end Nov.)
- CMU's Misuse study to be published for public comment after Buenos Aires
- CMU team will present findings at webinar (early Dec.)
- GNSO to consider next steps concerning study findings and important issues not addressed by the studies



# Annex – Background Info



## **Further Information**



 Whois Studies Overview & Status <u>http://gnso.icann.org/en/group-</u> <u>activities/other/whois/studies</u>

 Public Comment Forum for NPL Whois Privacy & Proxy Abuse Study

http://www.icann.org/en/news/public \_comment/whois-pp-abuse-study\_ 24sep13-en.htm

 Terms of Reference for CMU Misuse Study:

http://gnso.icann.org/issues/whois/tor -whois-misuse-studies-25sep09en.pdf

