

IP not ID

The fallacy of using internet addresses as personal identifiers and the implications for public policy

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InternetNZ

Who am I?

- Dean Pemberton
- Technical Policy Analyst, InternetNZ
 - *Manage*
 - *Platform*
 - *Inform*
 - *Enable*

IP not ID

- What is an IP address?
- What is an ID?
- Why are they not the same?
- Public Policy examples from New Zealand
- Implications for APNIC members

What is an IP address?

- A technical construct
- Specifies a network destination (or set of destinations)
- Used by the network to route packets
- Like all physical addresses it makes no assertions about the identities of occupants

What is an ID?

- A unique identifier for an individual.
- Examples
 - *drivers license*
 - *passport*
 - *national ID card*
 - *birth certificate*
 - *tax number*
 - *health number*
- Often a one to one mapping from an ID to an individual

Why are they not the same?

- New Zealand Passport Number: SJ839728
- Which person does this relate to?

- New Zealand Drivers License: OE839993
- Which person does this relate to?

Why are they not the same?

- The Westin Xian
- 66 Ci'en Rd, 曲江新, Xi'an
- Which person does this relate to?

- 113.200.68.226
- Which person does this relate to?

You can not turn one into the other

A device has an IP address not a person.

Mandating registration of IP addresses to machines still does not give you an individuals identity.

It is the wrong tool for the job.

Public Policy Implications

- Illegal filesharing
- Harmful digital communications
- Lawful interception

Illegal filesharing

- Soldier pinged by Skynet while on duty
- <http://www.stuff.co.nz/technology/digital-living/8419898/Soldier-pinged-by-Skynet-while-on-duty>
- "A member of the armed forces has been pinged \$255.97 by the Copyright Tribunal after his internet account was used by flatmates to illegally download and share Rihanna and Hot Chelle Rae tracks while he was on tour in Afghanistan.
- He said it had been impossible to find out which of eight flatmates had downloaded the music as they were then deployed around New Zealand. However, he said he took full responsibility."
- <https://internetnz.net.nz/news/blog/2013/Early-Lessons-Copyright-Tribunal>

Warning

- Next slide deals with the topic of teen suicide

Harmful digital communications

- <http://www.stuff.co.nz/technology/digital-living/9063751/Teens-self-cyberbullying-a-cry-for-help>
- "In recent weeks, media outlets around the world have reported on the tragic case of Hannah Smith, a 14-year-old girl from Leicestershire, England, who committed suicide after receiving cruel and harassing messages - including to "drink bleach" and "die" - on the social media site
- Ask.fm. Critics of the site have urged parents to keep their children off it, saying that the anonymous question/answer format leads to harassment, stalking and bullying
- Now the case has taken another tragic turn. In an inquiry into the matter, Ask.fm has uncovered that 98 per cent of the abusive messages sent to Hannah came from the same IP address as her own computer. Only four of the abusive comments came from other IP addresses"

- Hacked?
- Self-Harm?

Lawful Interception

- Targetting a single individual.
- Incidentally Obtained Intelligence
- Metadata

Implementations for APNIC

- Public policy being created that assume a use for IP addresses which is based on an invalid assumption
- APNIC whois database used as part of the tools to make arrests
- As a community we have an obligation to ensure that our messages to both policy makers as well as law enforcement supports valid assumptions with regard to IP addresses.

Discuss

Thank You