

Technology, Dissent, and Authoritarianism

Andrew Lewman
andrew@torproject.org

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The Promise of the Internet Yesterday

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- The best networks should win the most customers

The Reality of the Internet Today

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- Tiered access (charge by protocols)
- Constrained access (charge by byte)
- Gaming (want lower latency? pay more)

Git'yer internet here!

TELCO ADSL
Your email. Your world wide web. Your imagination.

\$29.95
Includes 500 MB of free transfers to high-priority websites at full speed. Limited to 128 kbps thereafter.

+ \$5 pathfinder
Includes a massive extra 1000 MB of credit for non-priority and non-web-MP websites. Limited to 256 kbps thereafter.

+ \$5 international

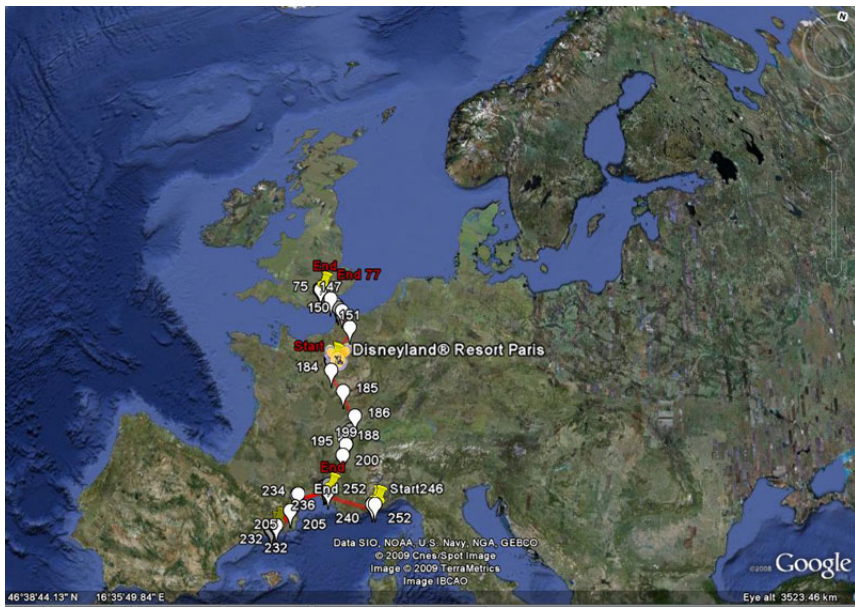
+ \$5 travel

+ \$10 hollywood
\$10 after September

+ \$0 the social
Just \$5 after three months

All social networks. All your friends. Includes all your dating sites.

Mobile Internet



Resisting Internet Censorship

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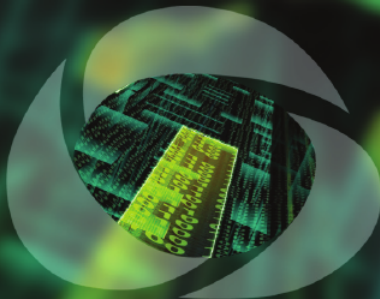
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But what if people are too afraid to do this?

If You Can See It You Can **Monetize It**



Evolved DPI – See what's flowing through your network

Internet surveillance is pervasive

- Conventional surveillance methods had to be targeted
- Internet censorship is capable of monitoring everyone, all of the time
- Governments are increasing monitoring: SORM (Russia), Golden Shield (China), and Interception Modernisation Programme (UK)
- 1 in 7 East German citizens worked for the Stasi. Today we can achieve the same results with a fraction of the cost



Traffic data surveillance

- Traffic data (who talks to whom, how often and for how long) is the core of intelligence capabilities
- This information is cheaper to record and store, compared to full content
- Because it can be easily processed by computer, data mining techniques can be used to understand social structures

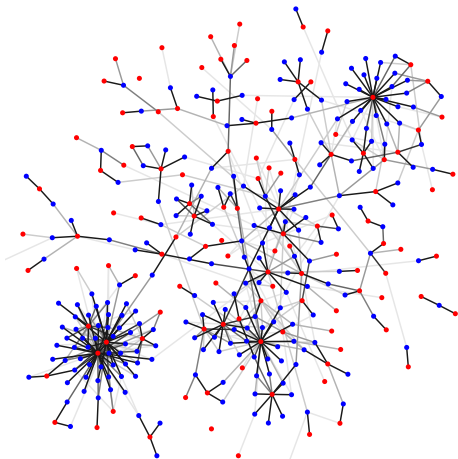


No government of any colour is to be trusted with such a roadmap to our souls

— Sir Ken Macdonald, former director of public prosecutions, on the UK Interception Modernisation Program

Importantly, information on social networks can be derived

- Communities
- People



From "The Economics of Mass Surveillance" by George Danezis and Bettina Wittneben

Lawful Intercept

Lawful Intercept (LI) describes the lawfully authorized interception and monitoring of telecommunications pursuant to an order of a government body, to obtain the forensics necessary for pursuing wrongdoers. LI has existed from the times of shortrange telegraphy to todays worldspanning Next-Generation Networks (NGNs).

Backdoor

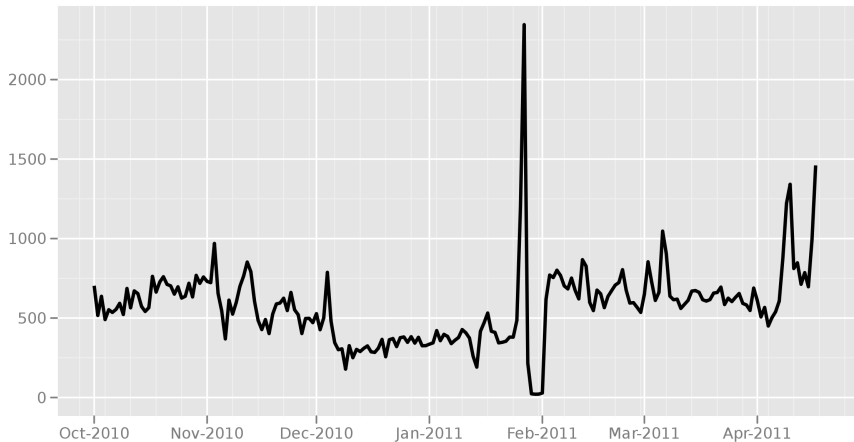
A back door describes a way to access a computer system or network that bypasses all security mechanisms. Anyone with knowledge of this backdoor can control all access and surveil all communications transmitting across the system.

Meanwhile.....



Tor usage in volatile times

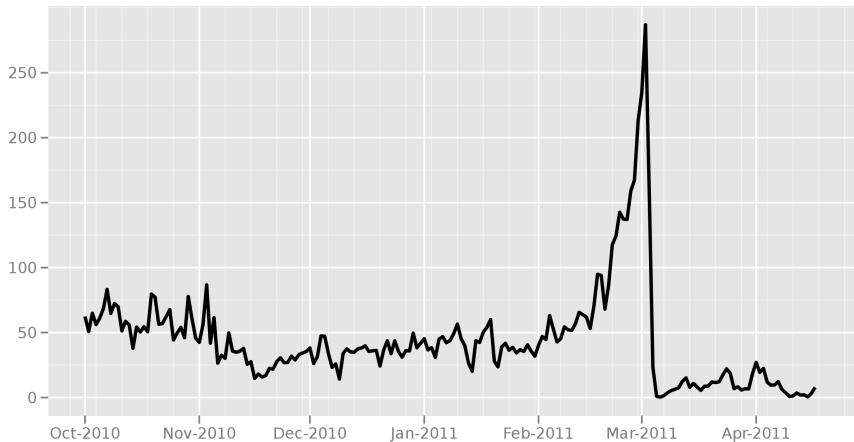
Directly connecting Egyptian Tor users



The Tor Project - <https://metrics.torproject.org/>

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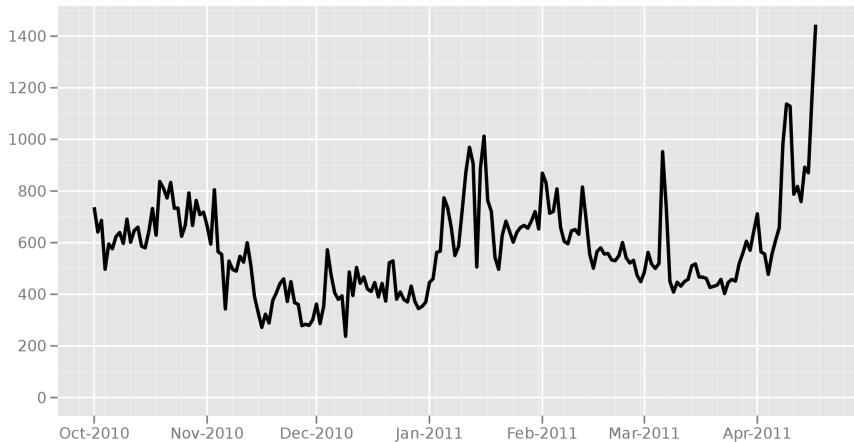
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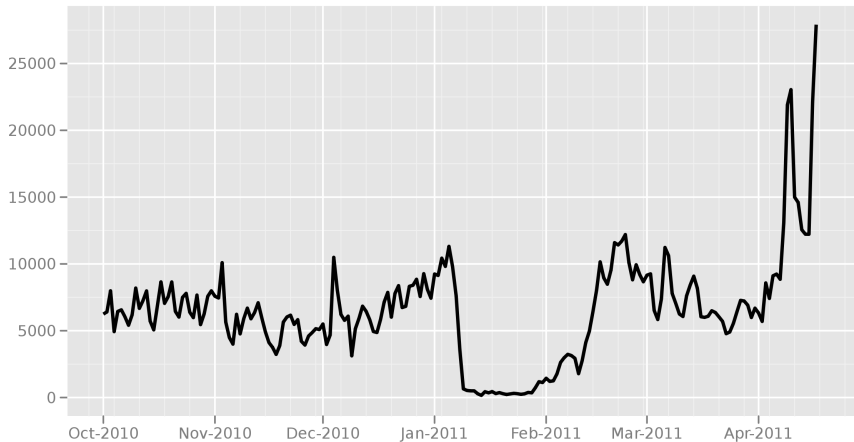
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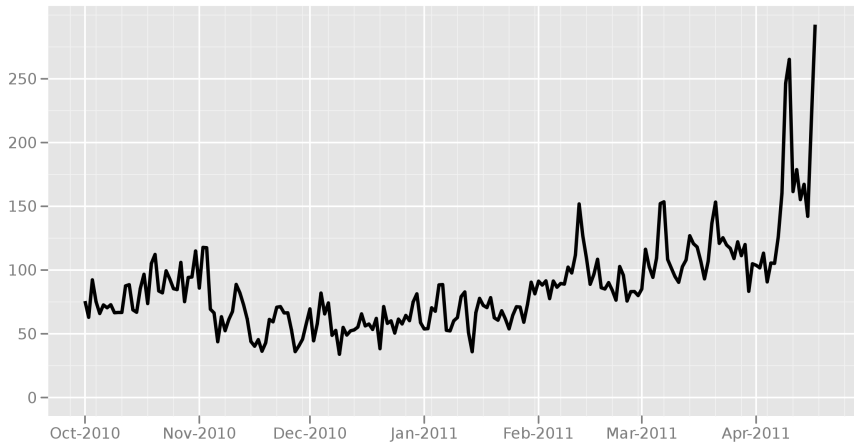
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Directly connecting Yemeni Tor users



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- Egypt still developing a government

The seed is planted

