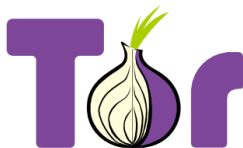


ITSG Tor Overview

Andrew Lewman
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April 14, 2010



TorProject.org

The Tor Project, Inc.

501(c)(3) non-profit organization dedicated to the research and development of technologies for online anonymity and privacy



What is Tor?

- online anonymity software and network

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Rice, UMN, NSF, NRL, Drexel, Waterloo, Cambridge UK, Bamberg Germany, Boston U, Harvard, MIT, RPI, GaTech
- increasingly diverse toolset:
Tor, Torbutton, Tor Browser Bundle, TorVM, Incognito LiveCD, Tor Weather, Tor auto-responder, Secure Updater, Orbot, TorFox, Torora, Portable Tor, Tor Check, Arm, Nymble, Tor Control, Tor Wall

estimated 500,000 daily users



Iran Protests: Twitter, the Medium of the Movement

By LEV GROSSMAN Wednesday, Jun. 17, 2009

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Share The U.S. State Department doesn't usually take an interest in the maintenance schedules of dotcom start-ups. But over the weekend, officials there reached out to Twitter and asked them to delay a network upgrade that was scheduled for Monday night. The reason? To protect the interests of

FBI Raids Queens Home in G20 Protest Twitter Crackdown



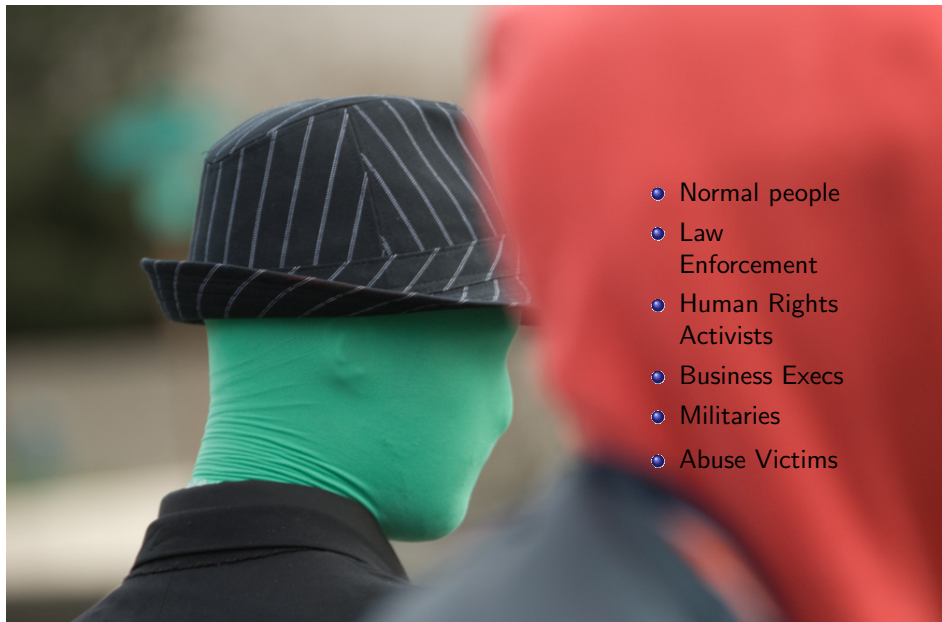
AP Photo/Matt Rourke

That's right, a Twitter crackdown. A lawyer for Jackson Heights social worker Elliot Madison, 41, says that the feds searched his client's house for 16 hours on Thursday after Madison was arrested on September 24th at a Pittsburgh hotel room with another man. What were they up to? Sitting at laptops sending Twitter messages advising [G20 demonstrators](#) about riot police activity in the streets. And yet *real* Twitter threats like [Lindsay Lohan](#) and [Courtney Love](#) remain at large.

Madison, a self-described anarchist, was in Pittsburgh volunteering for the [Tin Can Comms Collective](#), a group that uses Twitter to send mass text messages during protests describing events observed on the streets or over police scanners; stuff like "SWAT teams rolling down 5th Ave." Tin Can was active during the [St. Paul RNC protests](#), and the authorities are now on to them. Madison was charged with hindering apprehension or prosecution, criminal use of a communication facility and possession of instruments

of crime; he's currently out on bail.

Who uses Tor?



- Normal people
- Law Enforcement
- Human Rights Activists
- Business Execs
- Militaries
- Abuse Victims

Tor hides communication patterns by relaying data through volunteer servers

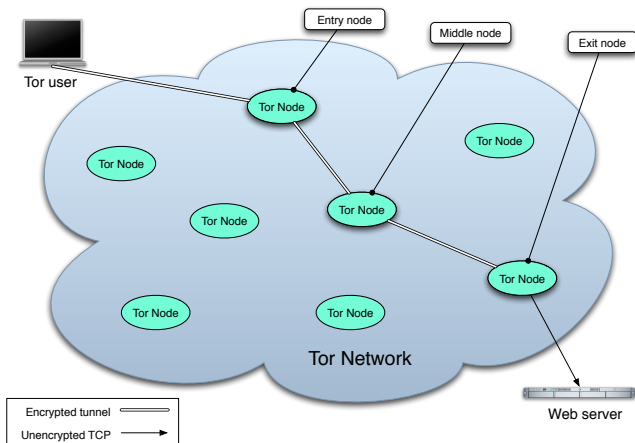


Diagram: Robert Watson

View Tor Network

Refresh Zoom In Zoom Out Zoom To Fit Help Close

Server

- whistlrmother
- tutzing
- desync
- chaoscomputercl...
- charlesbabbage
- freetux4ever
- Tonga
- madrid2
- jalopy
- croeso
- bettyboop
- myrnaloy
- tormentor
- b4tz
- tor26
- lefkada
- k0w
- mytornodefig
- communicator
- BostonUCCompSci
- anonymousbalsecc
- dizum
- pcpoint
- terpion
- cweiske
- sasquatch
- adeia
- inap1

Map showing Tor network connections across North America and Europe.

Connection	Status
so19charsimax,sasquatch,bellerophon...	Open
h760662,desync,1df060248c02d8	Open
Webdust,MARSolutions,FoeBuD2	Closed
▼ gtisc,spoon,recursion	Closed
209.237.230.67:80	Retry...
209.237.230.67:80	Retry...

gtisc (Online)

Location: US
 IP Address: 199.77.130.14
 Platform: Tor 0.1.1.23 on Linux i686
 Bandwidth: 1211 KB/s
 Uptime: 18 hours 26 mins 16 secs

- Measuring metrics anonymously
- NSF grant to find out
- Metrics portal:
`https://www.torproject.org/projects/metrics`

Tor hidden services allow privacy enhanced hosting of services



MoD 'how to stop leaks' document is leaked

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MoD 'how to stop leaks' document is leaked

October 4, 2009

By **Tom Chivers** (*Telegraph*)^[1]

The Defence Manual of Security is intended to help MoD, armed forces and intelligence agencies, protect themselves from foreign spies and others.

But the 2,400-page restricted document has found its way on to Wikileaks, a website that publishes leaked documents.

Operating Systems leak info like a sieve



- Applications, network stacks, plugins, oh my....

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- Applications, network stacks, plugins, oh my.... some call this "sharing"

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- Did you know Microsoft Word and OpenOffice Writer are browsers?

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- Applications, network stacks, plugins, oh my.... some call this "sharing"
- Did you know Microsoft Word and OpenOffice Writer are browsers?
- <http://www.decloak.net/> is a fine test

Mobile Operating Systems

- Entirely new set of challenges for something designed to know where you are
- Orbot: Tor on Android.
<http://openideals.com/2009/10/22/orbot-proxy/>
- iphone, maemo, symbian, etc
- Tor on Windows CE, <http://www.gsmk.de> as an example.

Next steps

Visit <https://www.torproject.org/> for more information, links, and ideas.

Credits & Thanks

- who uses tor?
<http://www.flickr.com/photos/mattw/2336507468/siz>, Matt Westervelt, CC-BY-SA.
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