Privacy, security and some basic e-sleuthing

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Don’t assume your emails, phone calls, web surfing and searches are private …

MEDIA & ADVERTISING

Head of The A.P. Criticizes Seizure of Phone Records

By RAVI SOMAIYA MAY 19, 2013

The head of The Associated Press said on Sunday that the Obama administration’s secret seizure of two months of its phone records, revealed this month, was “unconstitutional,” and had already diminished journalists’ capacity to report on the government.

The Justice Department has been widely criticized for the seizure, which covered 20 A.P. telephone lines, including its offices and the home phones and cellphones of journalists. The records were obtained without notice, directly from the phone company.

Thanks to this guy, I don't need to tell you that…

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Edward Snowden, NSA files source: 'If they want to get you, in time they will'

Source for the Guardian's NSA files on why he carried out the biggest intelligence leak in a generation – and what comes next

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The Guardian, Sunday 9 June 2013

Article history

The NSA Files: Decoded

Let’s not get paranoid …

Consider the threat – which is usually minimal

- What do I need to keep secret? (e.g. content of communication, source identities, files)
- Who do I need to keep it secret from? (the "adversary," e.g. government, source's employer, competing news orgs)
- What can they do to find out? (consider technical, legal, and social means)
- What happens if they do find out? (this is the risk, and will tell you how serious you need to be)

Exercises and lecture on threat modeling for journalists from Jonathan Stray

But sometimes we may need to cover our tracks

Web surfing

Every time you visit a website you reveal:

- **Operating system**
- **Regional and language settings**
- **Connection's "host name"**

  May allow people to guess your name, email address and so on
- **IP address**

  May identify where you work. Even surfing from home, IP addresses may identify you – for example they can appear next to messages left in online communities, and can be Googled.
- **Referring page**

  Reveals the link from which you clicked, or your search terms, if you are coming from a search engine.

Websites can also deposit tracking "cookies" on your machine

Check what information will be displayed to any website you visit:

http://www.ip-secrets.com/
http://whatismyipaddress.com/
http://anonymouse.org/cgi-bin/anon-snoop.cgi

To hide your IP address from a website:

Cover your tracks with an anonymous proxy server

http://anonymouse.org/anonwww.html
http://www.guardster.com/subscription/proxy_free.php
(Free for most surfing but may need to upgrade to paid service to access encrypted links anonymously)

(Or use coffee-shop wi-fi)

For a more systematic approach:

Install software to anonymize your web browsing:

https://www.torproject.org/

(See https://www.torproject.org/download/download.html.en#warning to learn how to alter your browsing behavior to use Tor effectively)

https://www.privateinternetaccess.com/
https://www.anonymizer.com/

(See this article for pros and cons of Tor vs VPN services like PIA and Anonymizer)

For private web searching:

https://www.ixquick.com/

https://startpage.com/eng/protect-privacy.html

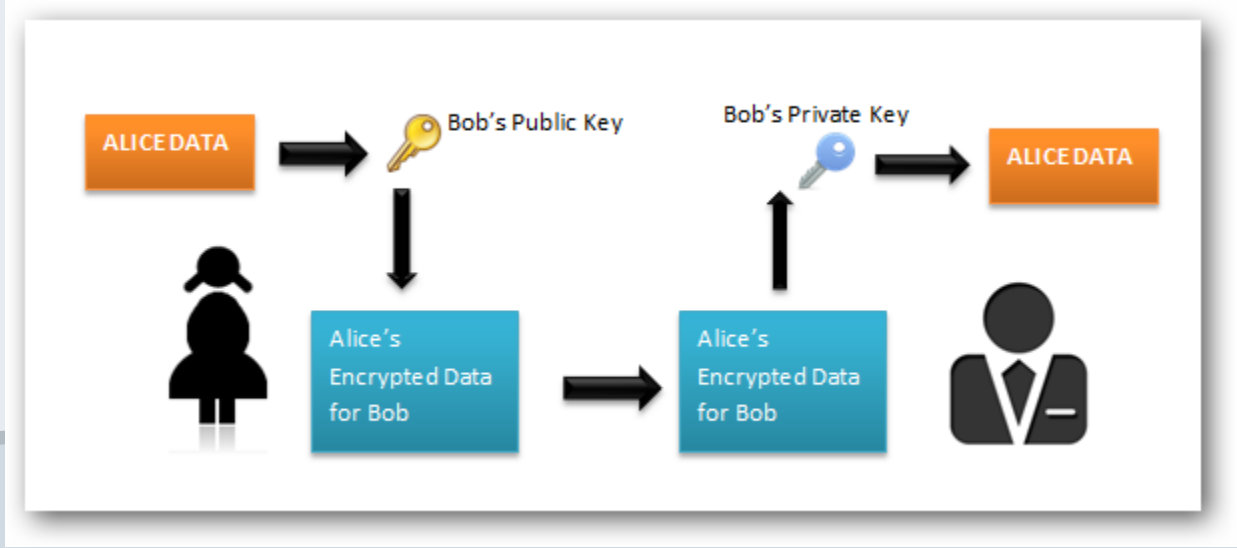
(See here for their policies)

Email

Use two-factor authentication for webmail services

Encrypt emails that you need to keep between you and a confidential source!

The basics, from here:



Encrypted email options

Enigmail for Thunderbird

https://emailselfdefense.fsf.org/en/

https://support.mozilla.org/en-US/kb/digitally-signing-and-encrypting-messages

Coming soon, End-to-End for Gmail

http://googleonlinesecurity.blogspot.com/2014/12/an-update-to-end-to-end.html

Encrypted email service:

http://www.hushmail.com/

(See http://www.hushmail.com/about/technology/security/ for details of service/policies)

More encryption

Encrypted chat

https://crypto.cat/
https://adium.im/

Encrypt files

http://support.gpgtools.org/kb/gpgservices-faq/how-to-encrypt-and-sign-text-or-files-with-gpgservices
(uses GPG tools, for Mac, see **here** and **here** for other tools for Mac, Windows and Linux)

Encrypt your laptop's hard drive

https://firstlook.org/theintercept/2015/04/27/encrypting-laptop-like-mean/

Here is a good overview of encryption in the context of journalism

Email

Tracing emails:

Paste email headers here:

http://whatismyipaddress.com/trace-email
http://www.ip-adress.com/trace_email/

Lesson: throwaway Gmail accounts provide some anonymity

Phone

Caller ID

- *67 blocks caller ID
- You can spoof caller ID with **http://www.spoofcard.com/**

Cellphones

- GPS enabled phones are personal tracking devices
- For private/anonymous conversations, use prepaid cellphones, paid for with cash, switch off and remove battery when not in use

Removing files from your computer

Deleting files does not destroy them, so to remove traces you need to overwrite them:

Windows: http://eraser.heidi.ie/

Mac: see this article

Putting it all together

This article reveals the exhaustive steps a confidential source would need to take to be sure their identity is secure

Who is behind a website?

Whois
http://www.easywhois.com
http://whois.domaintools.com/

Whois history
http://www.domaintools.com/research/whois-history/

What other websites are hosted at the same IP address?

http://www.ip-adress.com/reverse_ip/
http://www.linkvendor.com/seo-tools/domains-from-ip.html

Retrieve old/defunct websites and pages

Google Cache
Do a normal Google search, scroll over the downward facing triangle next to the url and select the Cached link.

Wayback Machine
http://www.archive.org/web/web.php

CyberCemetry
http://govinfo.library.unt.edu/default.htm
Archive of retired government web pages; look for missing reports etc

Monitor websites for changes

http://www.changedetection.com/

Or Firefox add-ons:
https://addons.mozilla.org/en-us/firefox/addon/alertbox/
https://addons.mozilla.org/en-us/firefox/addon/sitedelta/

As we've already noted: Websites are likely to change if their owners realize that information on the site is incriminating. So save web pages that are key to an investigation!

Social media searches

Paul Myers' social network search tool
http://www.google.com/cse/home?cx=016007582557612459539:wxiudovjrjc

Whos Talkin
http://www.whostalkin.com/

Icerocket
http://www.icerocket.com/

Other resources

Compilation of search resources for legal professionals
http://www.llrx.com/features/ciguide.htm

World phone directories
http://www.infobel.com/en/world/index.aspx

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