Privacy & Tracking Protection in Firefox

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overview
the state of online surveillance
how tracking works in practice
how widespread is it?
what can we do about it?
questions & discussion
the state of online surveillance
the public-private surveillance partnership

Bruce Schneier

Relationship specific to US context

Role of companies inside the surveillance eco-system
the business of surveillance
surveillance as the business model of the internet

trading data for “free” services
Comcast Wi-Fi serving self-promotional ads via JavaScript injection

The practice raises security, net neutrality issues as FCC mulls Internet reforms.

Verizon Injecting Perma-Cookies to Track Mobile Customers, Bypassing Privacy Controls

Optus hands over customers' numbers to websites

Optus has admitted that it hands over the mobile phone numbers of customers to websites that have a commercial relationship with the company, without its customers' knowledge.
data brokers
Google to Rake in 33% of Online Ad Revenues This Year

Worldwide digital advertising revenue forecast for the 10 largest ad publishers in 2013

<table>
<thead>
<tr>
<th>Company</th>
<th>Revenue (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>$38.6b</td>
</tr>
<tr>
<td>Facebook</td>
<td>$6.4b</td>
</tr>
<tr>
<td>Yahoo!</td>
<td>$3.5b</td>
</tr>
<tr>
<td>Microsoft</td>
<td>$2.9b</td>
</tr>
<tr>
<td>IAC</td>
<td>$1.6b</td>
</tr>
<tr>
<td>AOL</td>
<td>$1.1b</td>
</tr>
<tr>
<td>Amazon</td>
<td>$0.8b</td>
</tr>
<tr>
<td>Pandora</td>
<td>$0.6b</td>
</tr>
<tr>
<td>Twitter</td>
<td>$0.6b</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>$0.4b</td>
</tr>
</tbody>
</table>

Worldwide Digital Ad Revenue

- 2011: $86.4b
- 2012: $104.0b
- 2013: $117.6b
the public-private surveillance partnership

- Governments & corporations have similar goals
- Snowden disclosures: PRISM, MUSCULAR
- What companies know, governments can & will know
- Any reform must take into account this relationship
The National Security Agency is secretly piggybacking on the tools that enable Internet advertisers to track consumers, using "cookies" and location data to pinpoint targets for government hacking and to bolster surveillance.

The agency's internal presentation slides, provided by former NSA contractor Edward Snowden, show that when companies follow consumers on the Internet to better serve them advertising, the technique opens the door for similar tracking by the government. The slides also suggest that the agency is using these tracking techniques to help identify targets for offensive hacking operations.
how does it work in practice?
customerID=112
third-party cookies
suckerID=319
suckerID=319
top 1 million

67% use Google Analytics
Privacy

Tracking
- Request that sites not track you  Learn More
- Use Tracking Protection in Private Windows  Learn more

History
Firefox will: Use custom settings for history

- Always use private browsing mode
- Remember my browsing and download history
- Remember search and form history
- Accept cookies from sites
  - Accept third-party cookies: Always
    - Keep until: they expire
- Clear history when Firefox closes

Location Bar
When using the location bar, suggest:
- History
- Bookmarks
- Open tabs
Change preferences for search engine suggestions...
user agent
timezone
language
screen size
browser plugins
system fonts
fingerprinting
PANOPTICCLICK

Is your browser safe against tracking?

panopticlick.eff.org
how widespread is it?
The EU is disastrous for Britain: Chris Grayling's clearest signal yet he plans to back Leave campaign

Writing for the Telegraph, the Leader of the House of Commons says he backs David Cameron’s plan to renegotiate Britain’s membership.

UK's Brexit tantrum grates but the die is cast

Ambrose Evans Pritchard: Declassified files show Washington funded EU project for decades, but the US would adapt to a post-Brexit Britain.

Friends reunited: After years of speculation, the hit show's return is confirmed

Could we be any more excited?

Arsenal throw away chance to pull clear

Liverpool 3 Arsenal 3: Giroud puts visitors ahead after falling behind twice, but Joe Allen snatches point for Liverpool at death.
"Rechtssystem ist in schwerwiegender Weise deformiert"
Is Poland a failing democracy?

POLITICO asked leading thinkers, politicians and policymakers to weigh in on the Polish question.

BY POLITICO

Fear not, Poland. You won’t be kicked out of Eurovision!

Secret legal opinion inflames China trade fight

David Cameron’s latest Brussels problem: the local Tories
A Marseille, « le curseur en matière de haine des juifs est très élevé »

La communauté juive marseillaise, l'une des plus importantes d'Europe, s'organise avec fatalisme face aux agressions qui touchent les juifs en France.

- Marseille : l'adolescent qui a agressé un enseignant juif mis en examen et écroué
- « Renoncer à la kippa serait nous priver de notre judaïsme »
- Marseille : l'appel à ne plus porter la kippa fait débat
- Cinq questions sur la kippa
- Moscovici veut l'aide du FMI à Athènes
- Coupe de la Ligue : PSG-OL (2-1)
- Football : suivez PSG-Lyon en direct
209 different third-parties

26 on more than one site
what can we do about it?
SAY NO TO STRANGERS
political means
the EU's new privacy law

• Article 19, General Data Protection Regulation

• 2b. In the context of the use of information society services, and notwithstanding Directive 2002/58/EC, the data subject may exercise his or her right to object by automated means using technical specifications.

• Could imply Do Not Track specifications
technical means
block
network
requests
can't set any cookies

can't fingerprint you

can't see you in their logs
Reported Attack Page!

This web page at nsa.gov has been reported as an attack page and has been blocked based on your security preferences.

Attack pages try to install programs that steal private information, use your computer to attack others, or damage your system.

Some attack pages intentionally distribute harmful software, but many are compromised without the knowledge or permission of their owners.

Get me out of here!  Why was this page blocked?
Friday Beer Event

While coming over to Brussels to attend FOSDEM, don’t miss this great opportunity to taste some of the finest beer in Belgium (and hence in the world).

When?

Friday, 29 January 2016 from 16h00 onwards, but feel free to join the party at any time of the evening. We will be there until the bar closes (well after midnight).

Beer, Beer and some more Beer

This year’s beer event will again take place at the Delirium Café, in a beautiful alley near the Grand Place in Brussels. In addition to the enormous variety in beers, the location also has enough room to accommodate the vast crowd of geeks we tend to be.

There are 25 different draught beers available. In addition to these, there is a cellar full of regular and specialty bottled beer. The beer menu on the bar’s website, while always out of date, is a good indication of the wide selection available.

Beer Distribution Algorithm v3.3 (stable)

After about ten years of incremental improvements to our notorious Beer Distribution Algorithm, we appear to have reached a stable version with the algorithm used: v3.3. We have no changes to the algorithm to announce this year, at least up to now—if we change our mind, we will let you know you in time.

Security measures / access control

We have reserved the ground floor of the bar (Delirium Café) and the first floor (Hoppy Loft) as a private party for FOSDEM, and this between 18h00 and 2h00. You are welcome to join before 18h00, as well as stay after 2h00. The Delirium Café has been extended some more, so we will be able to move around a bit easier. FOSDEM volunteers will help us keep this area FOSDEM-only. If you meet a volunteer or a guard at the entrance to the bar or at the entrance to the alley, make it clear to him or her that you are there for the FOSDEM party.
Bienvenue au Delirium Café

Pour réserver: envoyez un mail à sophie@deliriumvillage.com (uniquement pour les groupes)
Safe Browsing Site Status

Google's Safe Browsing technology examines billions of URLs per day looking for unsafe websites. Every day, we discover thousands of new unsafe sites, many of which are legitimate websites that have been compromised. When we detect unsafe sites, we show warnings on Google Search and in web browsers. You can search to see whether a website is currently dangerous to visit.

Status of: http://www.deliriumcafe.be

Current status: 🕵️‍♂️ Dangerous

www.deliriumcafe.be is not safe to visit right now.

Site Safety Details

⚠️ Some pages on this website install malware on visitors’ computers.

Testing details

We last updated our information about www.deliriumcafe.be on January 21, 2016.

This website is hosted on 1 AS: AS39318 (NUCLEUS)
You're browsing privately

Not Saved
- History
- Searches
- Cookies
- Temporary Files

Saved
- Downloads
- Bookmarks

Please note that your employer or Internet service provider can still track the pages you visit.

Learn More.
converted and served by Mozilla to Firefox users

feeding.cloud.geek.nz/posts/tweaking-cookies-for-privacy-in-firefox
1st-party

v.

3rd-party
google.com
v.
google-analytics.com
avoid having a hard dependency on Google Analytics

developer.mozilla.org/Firefox/Privacy/Tracking_Protection
what about when you're browsing outside of private browsing?
about:config

privacy.trackingprotection.enabled
want to help?

report missing trackers

reach out to broken sites
Questions?

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bruce schneier:
https://commons.wikimedia.org/wiki/File:Bruce_Schneier_at_CoPS2013-IMG_9174.jpg

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cookie: https://www.flickr.com/photos/amagill/34754258/

happy cookie: https://www.flickr.com/photos/1080p/3080936724/

squirrel cookie: https://www.flickr.com/photos/tomitapio/3049686879/

copper cable: https://www.flickr.com/photos/theilr/8942861511/