

# Innovation & 'hackability' of the Open Web

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# Agenda

- The Web is a wonderful accident
- 1.2 billion citizens or 1.2 billion customers?
- Tools shape society, vendors shape tools
- Open Source for Open Standards





*Standards?*





# Phone system

- which has been improved and built-upon over time (fax machines then aDSL, VoIP and mobile)
- No need to know what brand of phone you use, nor the network you subscribed to. Just dial the number!





# Another example: e-mail

- You can use Windows, Mac OS X, Linux, \*BSD, Blackberry, Gmail, Yahoo Mail, Hotmail...
- ... and send messages to anyone you know who has an account, without taking care of what system he/she uses.





# Counter Examples

- Instant Messaging (IM)
  - ICQ, AIM, MSN, Y!M and dozens of other local providers.
  - Rarely interoperable
  - Battle between users and networks for interoperability.
- Office documents, .DOC/OOXML vs ODF





# Phone & IM vs Web

- Phone systems are built by industrials
  - Users are just consumers
  - Same for Instant Messaging
- **The Web and e-mail were built by the users using Open Standards**





In a connected world,  
standards empower  
users and enable  
participation





# A few key concepts

- The *Web Server* has the Web pages you want
- The *Network* carries data between the two
- *Your computer* has a *Web browser*. It's a piece of software that *displays* Web pages
- *Search engine*: A Web server that helps you find the pages you want.





# The Web and its original standards

- **HTML**: how to structure a document (just a Web page)
- **HTTP**: how to send a document over the network
- **URL**: how to identify a document (What name to give to the page)





# Additional standards

- **CSS:** how to *present* a document
- **JavaScript:** how to embed logic in a document (making the Web page 'smart')
- **RSS & Atom:** how to list new documents
- **Microformats:** how to embed machine-readable data inside the document





# Things we find in Web pages (1/2)

- **Text & Links**
- **Pictures** (sometimes animated)
- **Tables** (useful for data)
- **Forms** (to key in data, needed for applications)
- **Scripts** (putting intelligence into pages)
  - But they're quite slow to execute





Image  
Form  
Text  
Text  
Link  
Plug-in

The screenshot shows the Swisscom Corporate Business website. At the top, there is a navigation bar with the Swisscom logo, a search bar, and language options (DE, FR, IT, EN, ES). Below the navigation bar, there are tabs for Residential Customers, SME, Corporate Business (selected), and About Swisscom. The main content area features a large banner for Hospitality Services with the text "Can we help your business?". To the left of the banner is a vertical menu with links such as Home - Corporate Business, Hospitality Services, High-speed Internet Access, Conferences Services, Digital Television, Event Solutions, Business Centre Solutions, Partners, US Client Portal, Support, Newsroom, and Company Information. Below the banner, there are three small images with captions: "Hotel Managers", "Business Travellers", and "Organising a Conference?". On the right side, there is a "Hospitality news" section with a date "12.02.2009" and a headline "Bilderberg and Swisscom Deepen Their Partnership". A red dashed arrow points from the "Image" label to the Swisscom logo. Another red dashed arrow points from the "Form" label to the search bar. A red dashed arrow points from the "Text" label to the "Hospitality Services" text in the banner. A red dashed arrow points from the "Text" label to the "Can we help your business?" text in the banner. A red dashed arrow points from the "Link" label to the "Home - Corporate Business" link in the menu. A red dashed arrow points from the "Plug-in" label to the "EURO2008" logo in the footer area.

# Elements of a Web page





# Things we find in Web pages (2/2)

- **Plug-ins** (Java and Flash applets)
  - They are islands of information in the page
  - Plug-ins need to be installed separately
  - They're not Open Standards nor Open Source





# Plug-ins have been useful

- Heavy reliance on Plug-ins to mitigate the limitations of the Web
- But a heavy price in terms of freedom to participate and innovation:
  - You can't improve Flash
  - Hard to combine Flash with other elements in the Web page
  - People without Flash can't use your content





# Things we can't do with the Web in 2008

- Draw on the screen
  - (we can display images sent by the server, though)
- Display video
  - (We can use a Flash plug-in for it, though)
- Do a lot of computer-intensive computation





# Things we **can** do with the Web in 2009

- Draw on the screen
  - (we can process images locally now)
- Display video
  - (No more need for a Flash plug-in for it)
- Do a lot of computer-intensive computation (Yay, JIT-Tracing!)





The Open Web does  
more than you think





# It's not just about Mozilla

- Mozilla Firefox 3.x Beta
- Apple Safari 4 Beta
- Google Chrome 1.0/2.0
- Opera 10



Include JIT-Tracing,  
some SVG,  
Native video,  
HTML 5's Canvas

- IE 8 Release Candidate



*None of the above*





# Paul's demos

- JIT Tracing + Web Workers Thread: much faster JavaScript
- *Native Video* in an Open Format
- Canvas: drawing on the screen
- CSS 3 (@font-face): better layout
- SVG Filters: special effects on pages
- *All of this can be combined together*





# Building a *hackable* World





*Hackable?*





The Web is not TV







You don't have to  
passively consume





# The Net is a platform

- People can build on it
- They don't have to ask for permission
- They should not have to pay to participate
- They should not have to own equipment from a specific brand to participate
- ***When people participate, wonders happen!***





Examples?





# Wonders...

- Wikipedia - <http://nl.wikipedia.org/>
- Kutiman's remix - <http://thru-you.com/>
- Open Source in general





# Hacking your page

- Changing the **look**: <http://userstyles.org/stylish/>
- Changing the **content**: GreaseMonkey scripts
- Changing the **interaction**: Ubiquity
- Changing the **browser**: Add-ons





# Olivier's demo





It's up to each of us to  
make this participative  
and innovative world  
happen





# Thank you!

[nitot@mozilla-europe.org](mailto:nitot@mozilla-europe.org)





# Example: TidyBug

- cleans up the show-bug page on [bugzilla.mozilla.org](http://bugzilla.mozilla.org).
- hides empty fields, making it easier to see the fields that are populated and reducing the amount of scrolling needed to see the comments.
- <http://www.squarefree.com/2009/02/26/tidybug/>





Bugzilla@Mozilla - Bug 480443 URLbar should only show address tooltip when overflowing Last modified: 2009-02-26 16:28:26 PST

Home | New | Search | Find | Reports | My Requests | My Votes | Preferences | Administration | Help | Log out jruderma@gmail.com

Bug List: (This bug is not in your last search results) [Show last search results](#)

**Bug 480443 - URLbar should only show address tooltip when overflowing (edit)** [Last Comment](#)

Status: NEW (edit)

Whiteboard: [polish-easy][polish-interactive]

Keywords:

Product: Firefox

Component: Location Bar and Autocomplete

Version: Trunk

Platform: All

Importance: minor (vote)

Target Milestone:

Assigned To: Nobody; OK to take it and work on it (edit)

QA Contact: location\_bar@firefox.bugs (edit)

URL:

Depends on:

Blocks:

Show dependency tree / graph

Commit

Restrict Group Visibility: Only users in all of the selected groups can view this bug:  
(Unchecking all boxes makes this a more public bug.)

- Confidential Mozilla Corporation Bug
- Confidential Mozilla Project Bug (use another group if possible)
- Security-Sensitive Core Bug

Attachments

|  |                             |  |
|--|-----------------------------|--|
| patch (2.84 KB, patch)<br>2009-02-26 16:19 PST, Geoff Lankow | sdwilsh: review? (dietrich) | <a href="#">Details</a>   <a href="#">Diff</a> |
|--|-----------------------------|--|

[Add an attachment](#) (proposed patch, testcase, etc.) [View All](#)

[Collapse All Comments](#) - [Expand All Comments](#)

Description From Geoff Lankow 2009-02-26 16:16:26 PST (-) [reply] Private

User-Agent: Mozilla/5.0 (Windows; U; Windows NT 6.0; en-US; rv:1.9.1b2)  
Gecko/20081201 Firefox/3.1b2  
Build Identifier: Mozilla/5.0 (Windows; U; Windows NT 6.0; en-US; rv:1.9.1b2)  
Gecko/20081201 Firefox/3.1b2

The tooltip for the location bar is displayed even when the location is clearly visible. It should only show when the location overflows. As far as I can tell, this is the way Firefox used to behave.

Reproducible: Always

Steps to Reproduce:

1. Visit a website with a short address
2. Hover over the location bar

Actual Results:  
Tooltip shows, with the same text as shown in the location bar

Expected Results:  
Tooltip doesn't show, unless address is too long to be displayed

----- Comment #1 From Geoff Lankow 2009-02-26 16:19:08 PST (-) [reply] ----- Private

[Created an attachment \(id=364418\) \[details\]](#)  
patch

This is my first ever patch! Please be gentle. :)

Additional Comments: Private

Status: NEW

[Mark as Duplicate](#)

Commit

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Show more | Show flags | 2 | Make bug secret | Commit

Status: NEW (edit)

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Component: Location Bar and Autocomplete

Whiteboard: [polish-easy][polish-interactive]

Reported: 2009-02-26 16:16 PST by Geoff Lankow

Modified: 2009-02-26 16:28 PST (History)

CC List:  Add me to CC list  
2 users (edit)  
sdwilsh@forerunnerdesigns.com  
tyler@christianlink.us

Attachments

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Before

After





# To be fair...

- Flash is mature technology and widely distributed
- 

