



# GOOGLE MAY BE TRYING TO TAKE OVER THE WORLD

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and Why That's Not Necessarily a Bad Thing

# GOOGLE IS...



- You know what Google is. Google is the de facto go-to search interface for the web.
- Google's mission: to organize the world's information and make it universally accessible and useful.
- 2009 saw significant improvements to Google's search algorithm, along with the introduction of real-time search.

# GOOGLE IS...

- Advertising. It's the business model. AdWords and AdSense are their chief products.
- Google's number one revenue stream: Advertising. \$22.9 Billion in advertising revenue in 2009. That's 96.7% of their total revenue.

([http://investor.google.com/fin\\_data.html](http://investor.google.com/fin_data.html))



Image credits: <http://www.squidoo.com/recycle-everything>, <http://www.businessinsider.com/chart-of-the-day-in-case-you-had-any-doubts-about-where-googles-revenue-comes-from-2010-2>

# GOOGLE IS...



- Wait, that sounds like two things.
  - *Yes, it does.*
- So which is it? Advertising? Or organizing the world's information?
  - *Both. It has to do the second to do the first.*

# GOOGLE IS...

- “The remarkable thing about these software mega-brands is that they employ bright, forward-looking technologists and have unprecedented access to capital and development resource — **they leave no stone unturned in their quests to expand into relevant future markets.**”

*Mar 25, 2010, “The Green Battle: Microsoft and Google Fight for Our Energy Data,” Alix Vance on The Scholarly Kitchen (Society for Scholarly Publishing’s Blog) <http://scholarlykitchen.sspnet.org/2010/03/25/the-green-battle-microsoft-and-google-fight-for-our-energy-data/>*

# GOOGLE IS...



- “Google's overriding interest is to (a) maximize the amount and velocity of the traffic flowing through the web and (b) ensure that as large a percentage of that traffic as possible goes through its search engine and is exposed to its ads. One of the most important ways it accomplishes that goal is to promote the distribution of as much free content as possible through as many sites as possible on the web.”

*Apr 10, 2009, “Google in the middle,” Nicholas Carr on Rough Type ([http://www.roughtype.com/archives/2009/04/google\\_in\\_the\\_m.php](http://www.roughtype.com/archives/2009/04/google_in_the_m.php))*

# GOOGLE IS...



- “... Google’s business model and practices broadcast that open content is more linkable and valuable. Open content leads to more sharing, more automated linking, more traversals to drive the awareness that results in linking, which all lead to more money for Google...”

*Mar 4, 2010, “Orbiting the Google — A Gravitational Pull Affecting Our Lives and Thinking,” Kent Anderson on The Scholarly Kitchen (Society for Scholarly Publishing’s Blog)*  
<http://scholarlykitchen.sspnet.org/2010/03/04/orbiting-the-google-a-gravitational-pull-that-affects-our-lives-and-thinking/>

# GOOGLE IS...



- Growth has slowed year to year:
  - 56% in 2007
  - 29% in 2008
  - 08% in 2009
  
- Google sees its mission broadly: *“We build web applications, or “apps”, to make it simpler for people to share information and get things done together.”* (<http://www.google.com/corporate/>)



# GOOGLE IS BRANCHING OUT...



## □ **Search:**

- The Web - *google.com*
- Your Computer - *desktop.google.com*
- All of the above - *code.google.com/p/qsbs-mac/*
- Geography - *maps.google.com*
- Books - *books.google.com*
- Articles - *scholar.google.com*
- People – *profiles.google.com*

# GOOGLE IS BRANCHING OUT...



## □ **Applications**

- Calendar - [calendar.google.com](https://calendar.google.com)
- Email - [mail.google.com](https://mail.google.com)
- Text/Spreadsheet/Presentation - [docs.google.com](https://docs.google.com)
- Browser - [chrome.google.com](https://chrome.google.com), Chromium
- Newsreader – [reader.google.com](https://reader.google.com)
- Mobile OS - [android.com](https://android.com)
- Voicemail – [www.google.com/voice](https://www.google.com/voice)

# GOOGLE IS BRANCHING OUT...



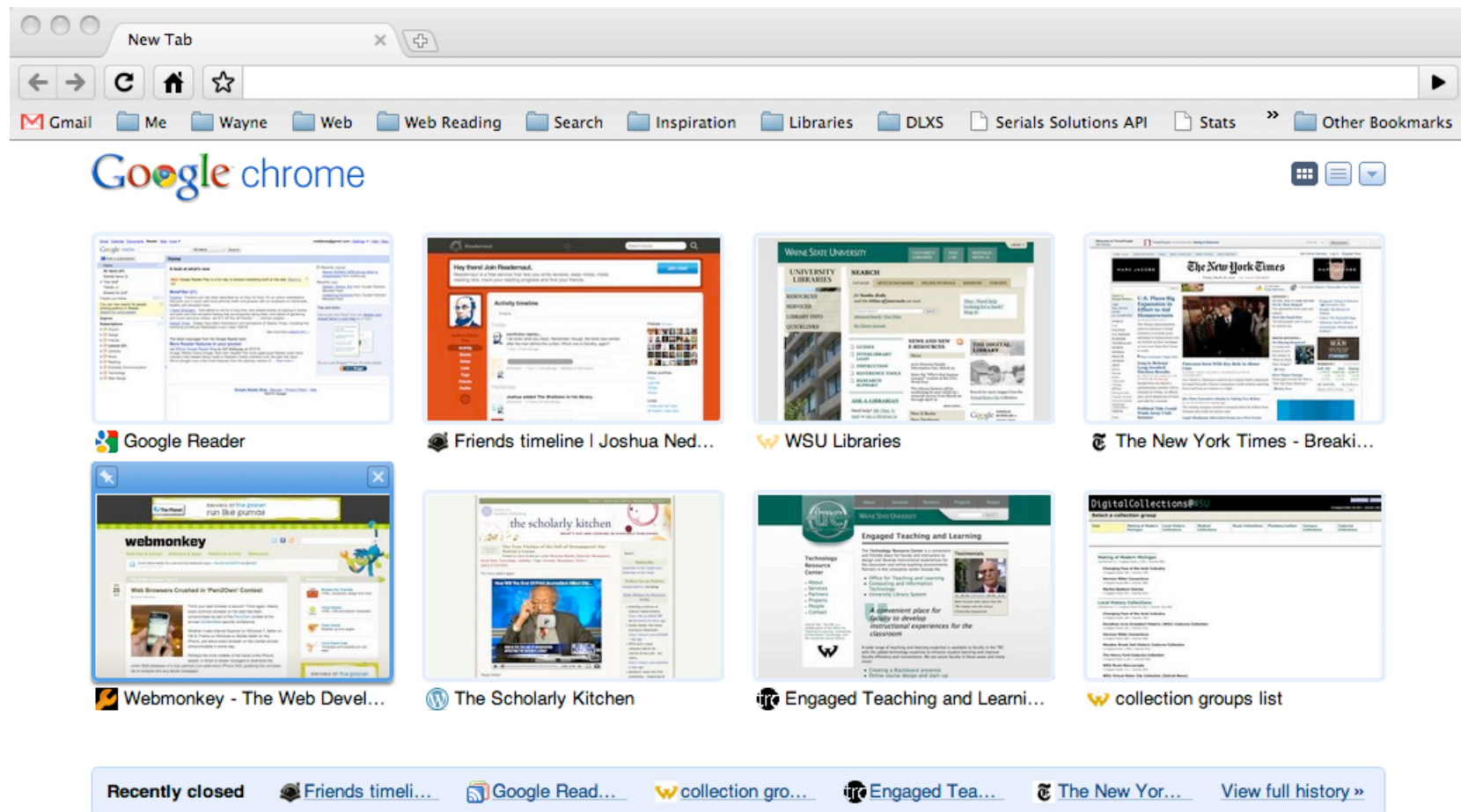
## □ **Non-Traditional Applications**

- Operating System - Google Chrome OS
- Chrome Frame - [code.google.com/chrome/chrome/chrome](http://code.google.com/chrome/chrome/chrome.html)
- Wave - [wave.google.com](http://wave.google.com)



SO, LET'S TAKE A LOOK AT SOME  
OF THIS STUFF...

# GOOGLE CHROME

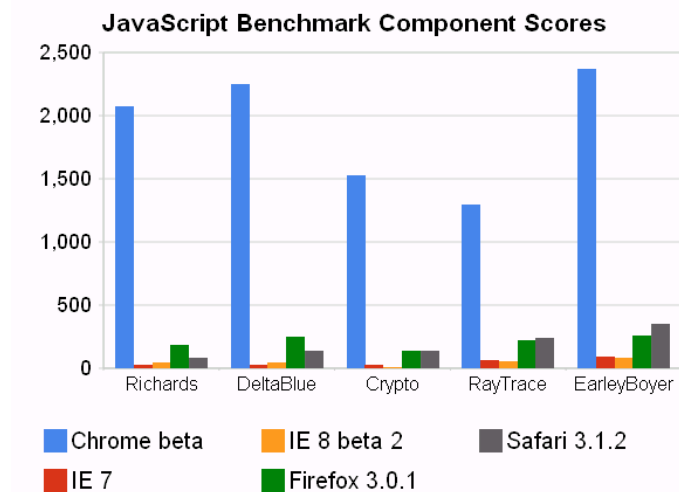


Press **⌘-T** to open a new tab.

# GOOGLE CHROME

- <http://www.google.com/chrome>
- A Web Browser, and the base for the Chrome OS
- Google claims it's "fast to launch, fast to load web pages" and very simple. Are they right?
- CNET says yes: Chrome beats IE/Firefox/Safari on 5 different Javascript benchmark tests.

([http://news.cnet.com/8301-1001\\_3-10030888-92.html](http://news.cnet.com/8301-1001_3-10030888-92.html))



# GOOGLE CHROME



## □ Simple?

- There's not a lot of UI cruft. Tabs simplify browsing.
- The address bar is now omni-functional ('Omnibox').
  - Type a URL
  - Enter a search term
  - Google will autosuggest, and determine which is which.
- "Most visited" pages accumulate on the homepage, a la Opera. Google learns over time what you visit.
- Tabbed browsing is drag-and-drop functional.
- Secure: only browser left standing at today's Pwn2Own

# GOOGLE CHROME

## □ Javascript

- Google has written an entirely new Javascript Virtual Machine, called V8, the code that runs Javascript in the browser.
- Generates code dynamically. Instead of reading and then interpreting, V8 compiles Javascript into machine code to run faster.
- Engineered to clean up memory better, making for faster, smoother transitions.



Scott McCloud, [http://www.google.com/googlebooks/chrome/big\\_16.html](http://www.google.com/googlebooks/chrome/big_16.html)



# GOOGLE CHROME



## □ **Wait, Chrome OS?**

- Currently in development, projected to launch late this year.
- A lightweight Linux distribution based on Debian
- The browser **is** the operating system – applications load in tabs. Boots instantly, instantly online.
- No hard drive. Applications and data live in the cloud.
- Will come preinstalled on a Chrome netbook. Cannot be downloaded.

# GOOGLE CHROME



## □ Privacy?

- Google's data-collection practices are notorious. There is no indication that Chrome will be any different.
- Google has always been gathering data on web-browsing behavior by proxy – through its search interface. Now it will have an opportunity to gather “primary sources” as it were.
- Privacy may be a moot point, if adoption outstrips our concerns.

# GOOGLE CHROME



## □ **Why Google Chrome?**

- ▣ It serves as the base for the upcoming OS.
- ▣ Google services run better in it.
- ▣ Google plans on providing more services. Without a native Google browser, it is not maximizing its potential for those services.
- ▣ Google remains at a disadvantage if it doesn't control its environment, especially if it has to serve Javascript-heavy applications to Javascript Virtual Machines it doesn't control.

# GOOGLE CHROME FRAME

- [\*\*http://code.google.com/chrome/chromeframe/\*\*](http://code.google.com/chrome/chromeframe/)
- A plug-in for IE that overlays IE's native Javascript / HTML rendering engine with Google's
- Provides access to HTML5 elements, like <video> and <canvas>, that IE doesn't yet support.
- Provides Google with the opportunity to run its optimized Javascript engine in the World's Most Popular Browser™, paving the way for heavily-Javascript-dependant Google apps.

# GOOGLE CHROME FRAME

- From the FAQ: “Google Chrome Frame is an Active Document Server that hosts web pages rendered using Google Chrome's rendering engine”
- “Google Chrome Frame is designed to work only inside Internet Explorer and not with other browsers” (<http://code.google.com/chrome/chromeframe/faq.html>)
- Triggered by the webpage:
  - ▣ `<meta http-equiv="X-UA-Compatible" content="chrome=1">`

# GOOGLE CHROME FRAME



## □ Why Chrome Frame?

- ▣ It's a workaround to IE's notoriously lax standards support. Web designers/developers grumble about IE. Chrome Frame allows Google to design however it wants and just “trump” IE's native rendering capabilities.
- ▣ It's a trojan horse to prepare the way for:

# GOOGLE WAVE

Google wave  
preview

Joshua | [Feedback](#)<sup>NEW!</sup> | [Terms](#) | [Privacy](#) | [Help](#) | [Sign out](#)

Navigation

Inbox

All

By Me

Requests

Extensions

Settings

Trash

Spam

SEARCHES (+)

FOLDERS (+)

Contacts

Joshua

Search contacts

Vince what is wave?

Jason G Bearded and growing

John Tired. Spinning class

Manage contacts (+)

Inbox 1 - 6 of 6

New wave in:inbox

Follow

Unfollow

Archive

Inbox

Spam

Read

...

<input type="checkbox"/>		-	11:35 am	1 msg
<input type="checkbox"/>		Whiskerino wave, ya'll. - I'm guessing this is how it's done.	Mar 3	73 msgs
<input type="checkbox"/>		Invite others to Google Wave - Google Wave is more fun when you	Dec 8, 2009	1 msg
<input type="checkbox"/>		- something on your mind?	Dec 1, 2009	2 msgs
<input type="checkbox"/>		It looks like we'll be the first! - Nice. Josh is in too...if I could just g	11:37 am	5 msgs
<input type="checkbox"/>		Welcome to Google VWave - Click the links below to open waves with	Nov 24, 2009	1 msg

Save search

It looks like we'll be the first!

(+)

Reply

Edit

Playback

Unfollow

Archive

...

Paul Gallagher:

It looks like we'll be the first!

Nov 30, 2009 ▾

Jonathan McGlone: Nice. Josh is in too...if I could just get his contact...

Nov 30, 2009 ▾

Jonathan McGlone: Got his contact, he's in the wave

Nov 30, 2009 ▾

Me: I am in the wave. Note that my profile pic is actually waving.

Nov 30, 2009 ▾

Me:

11:37 am ▾

file

Tags: (+) 

Images ▾

# GOOGLE WAVE

- Google Wave is a “hosted conversation with only one copy that anyone can contribute to”
- Currently in Beta, must be invited (much like Gmail a few years ago).
- Google is pinning high hopes on this becoming a default project manager – slash – workflow manager – slash – next gen email app.





# GOOGLE WAVE FEATURES

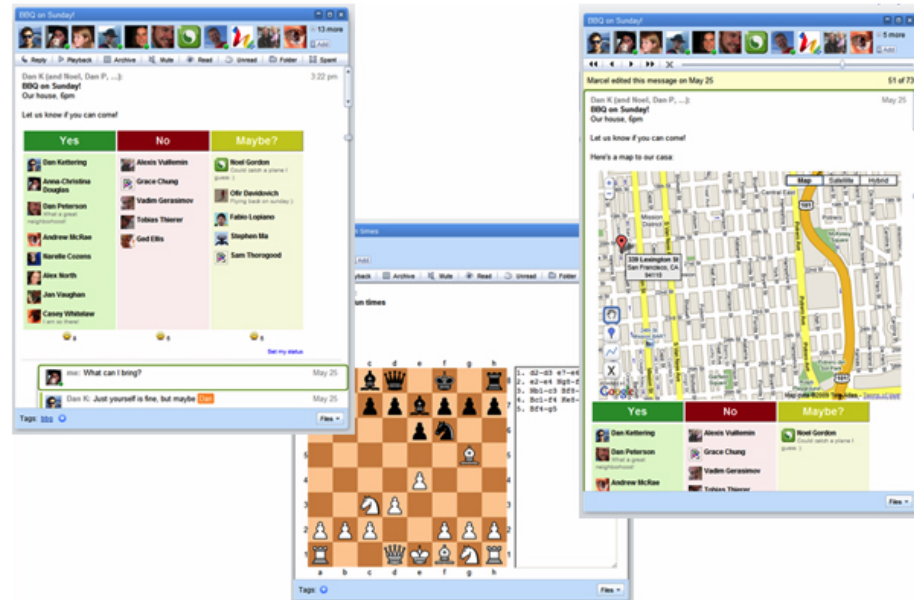
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- **Wiki:** Anyone can edit anything.
- **Playbackable:** You can rewind and fast forward to see what/when additions were made.
- **Embeddable:** Can be embedded in a website, like a video.



# GOOGLE WAVE FEATURES

- ❑ **Extensions:** Gadgets (applications) and Robots (automated ‘smart’ conversation participants / scripts)
- ❑ API was updated just this month to allow “push” inclusions in the wave from live data.



# GOOGLE WAVE FEATURES

- **Open Source:** That's right.

- ▣ Can be developed / extended

- ▣ Can be hosted locally, like Microsoft Exchange Server

- ▣ Attractive to early adopters

- “Open-source is central to Google’s strategy to foster quick adoption. And if people start using or even switching over to Google Wave, then it could very well be the game-changing communication tool that everyone has been waiting for.”

- (<http://mashable.com/2009/05/31/google-wave-features/>)

# GOOGLE WAVE



## □ Why?

- Google Wave is developed to be like email for the social software set – editable, conversational, extensible, exportable.
- If it takes off, Google will be even better positioned to oversee the world of online data and interaction, since the Wave is hosted.
  - President Google?
- Wave requires Google's underlying Javascript support, or something like it.

## □ More:

- <http://www.businessinsider.com/chart-of-the-day-in-case-you-had-any-doubts-about-where-googles-revenue-comes-from-2010-2>
- [http://news.cnet.com/8301-1001\\_3-10030888-92.html](http://news.cnet.com/8301-1001_3-10030888-92.html)
- <http://www.fiercecio.com/techwatch/story/firefox-ie8-safari-and-iphone-overcome-day-one-pwn2own/2010-03-26>
- <http://gizmodo.com/5408504/everything-you-need-to-know-about-chrome-os>
- <http://mashable.com/2009/05/31/google-wave-features/>
- <http://mashable.com/2010/03/02/google-wave-api/>
- <http://moconews.net/article/419-androids-secret-sauce-googles-little-known-advertising-rev-share-deals-/>
- [http://www.routhtype.com/archives/2009/04/google\\_in\\_the\\_m.php](http://www.routhtype.com/archives/2009/04/google_in_the_m.php)
- <http://scholarlykitchen.sspnet.org/2010/03/25/the-green-battle-microsoft-and-google-fight-for-our-energy-data/>
- <http://scholarlykitchen.sspnet.org/2010/03/04/orbiting-the-google-a-gravitational-pull-that-affects-our-lives-and-thinking/>
- [http://www.wired.com/magazine/2010/02/ff\\_google\\_algorithm/all/1](http://www.wired.com/magazine/2010/02/ff_google_algorithm/all/1)
- [http://www.youtube.com/watch?v=0u84XD\\_rdwI](http://www.youtube.com/watch?v=0u84XD_rdwI)
- <http://www.google.com/googlebooks/chrome/>
- <http://code.google.com/chrome/chrome/iframe/>
- <http://code.google.com/chrome/chrome/iframe/faq.html>
- [http://investor.google.com/fin\\_data.html](http://investor.google.com/fin_data.html)
- <http://www.google.com/corporate/>
- <http://www.google.com/intl/en/options/>
- <http://www.google.com/chrome>

