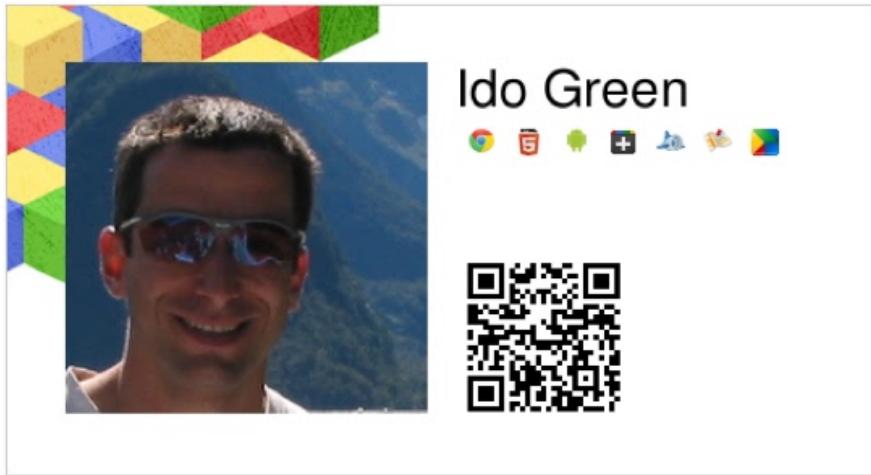


ChromeOS & HTML5

A true friendship



HTML5 Training Day March 2012



Ido Green

Developer Advocate



<http://plus.ly/greenido>



greenido.wordpress.com



chrome

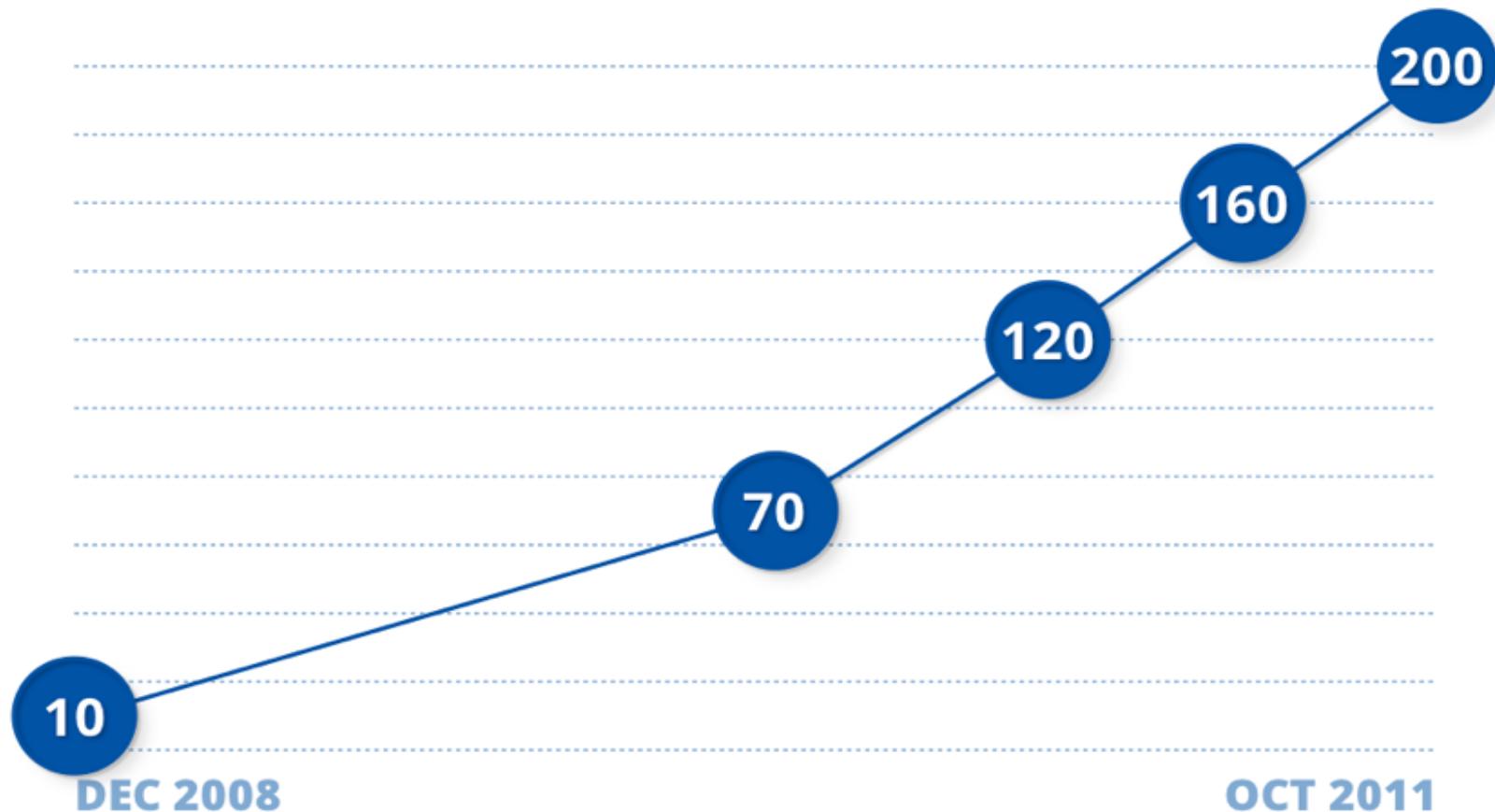
Agenda

- The State of Chrome
- HTML5 and modern web apps
- Chrome web store
- ChromeOS
- Chromebooks
- Q&A



Where are we now?

200 million active Chrome users



- Audio/Video
- GPU
- WebGL
- NaCL
- IndexedDB
- Web RTC
- File APIs
- Dev Tools
- Lots more...



HTML5 - Making the web more powerful

Graphics



Video/Audio
Playback



Threads



Notifications



Real-Time
Communication



Local
Storage



HTML5 & CSS3 READINESS

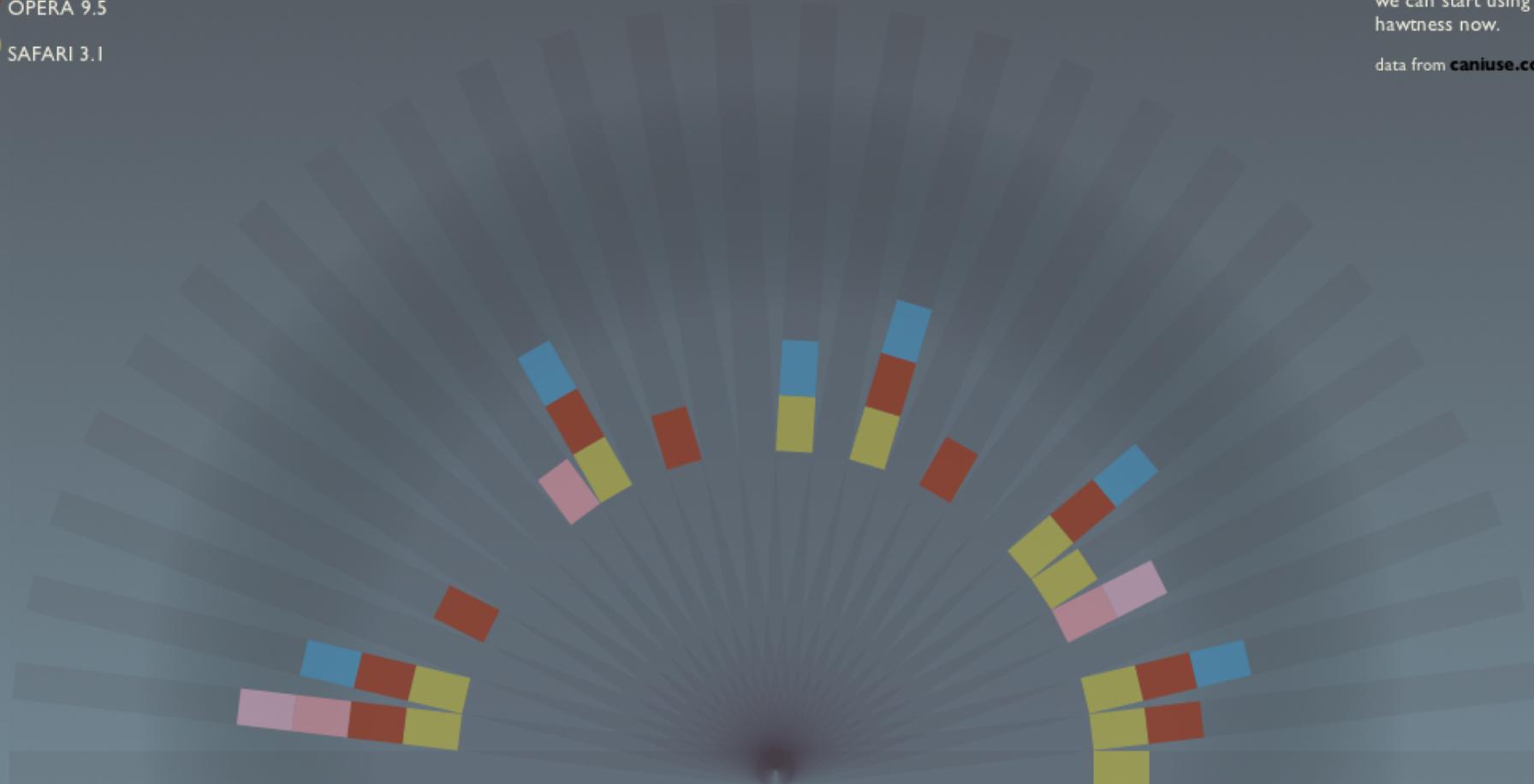
2008 / 2009 / 2010 / 2011

- IE 6
- IE 7
- FIREFOX 2.0
- OPERA 9.5
- SAFARI 3.1

Many of these features are ready to implement *today*.

We don't have to wait for entire specs to be completed, we can start using some hawtness now.

data from caniuse.com



FROM THE ASYLUM RUN BY **PAUL IRISH AND DIVYA MANIAN** | [ABOUT THIS SITE](#)



HTML5 & CSS3 READINESS

2008 / 2009 / 2010 / 2011

- IE 7
- IE 8
- IE 9
- FF 3.6
- FF 4.0
- OPERA 11
- SAFARI 5
- CHROME

Many of these features are ready to implement *today*.

We don't have to wait for entire specs to be completed, we can start using some awesomeness now.

data from caniuse.com



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The Power Of The Cloud

+

Desktop Richness

Modern Web Apps

ANGRY BIRDS

BETA



PLAY



SD VERSION

HD VERSION

chrome.angrybirds.com



ro.me



```
<meta http-equiv="X-UA-Compatible" content="chrome=1" />
```



Make it **easy** for user
to **discover great**
apps, extensions and
themes

Make it **easy** for
developers and **brands** to
reach the 200+ million
Chrome users

chrome web store

Home Popular

greenido@gmail.com ▾

Search the store

Popular Collections

Education Entertainment Family Games Lifestyle News & weather Productivity Shopping Social & communication Utilities Extensions Themes

 <p>Angry Birds 1,000,000+ users</p>	 <p>YouTube 1,000,000+ users</p>	 <p>Gmail by Google 1,000,000+ users</p>	 <p>AdBlock. THE MOST POPULAR EXTENSION FOR CHROME. AdBlock 1,000,000+ users</p>
 <p>Google Calendar 1,000,000+ users</p>	 <p>Adblock Plus <i>The advanced ad blocker</i> Adblock Plus for Google C... 1,000,000+ users</p>	 <p>Google Mail Checker 1,000,000+ users</p>	 <p>FB Photo Zoom 1,000,000+ users</p>
 <p>Google Maps 1,000,000+ users</p>	 <p>Plants vs Zombies Play Now PopCap 1,000,000+ users</p>	 <p>Offline Google Mail 862,749 users</p>	 <p>Google Translate ★★★★★ This extension translates entire webpages into a language of your choice with one click. By the Google Translate team. + ADD TO CHROME</p>
 <p>Google Chrome to Phone ... 860,314 users</p>	 <p>IE Tab Say Goodbye to IE 838,905 users</p>	 <p>Turn Off the Lights 836,215 users</p>	 <p>Google Docs 810,344 users</p>



Reuters

NATO Attack Destroys Much of Qaddafi Compound

BY JOHN F. BURNS

TRIPOLI, Libya — In a sudden, sharp escalation of NATO's air campaign over Libya, warplanes dropped more than 60 bombs on targets in Tripoli on Tuesday, obliterating large areas of Colonel Muammar el-Qaddafi's Bab al-Aziziya command compound.

In response, Colonel Qaddafi posted an audio recording on Libyan state television vowing never to surrender or accept defeat. "We welcome death," he said. "Martyrdom is a million times better."

The unusual daylight raids, the most intense on the Libyan capital since the aerial campaign started more than 11 weeks ago, began in midmorning and continued after dark — fulfilling NATO commanders' recent warnings of an impending rise in the intensity of attacks. What appeared to be bunker-busting bombs laid waste to an area of about two acres in one corner of the compound, destroying six or seven major buildings and leaving a twisted, smoking mass of steel and concrete.

A Libyan official said Tuesday night that the attacks killed 31 people and wounded dozens more, many of them security guards and "totally innocent civilians." That number could not be confirmed.

Earlier, officials said that 10 to 15 people lay buried in the ruins of one building alone, though the only casualty seen by Western reporters who were bused to the scene was a man who was pulled from the rubble while they were there, identified by officials as a cleaner.

In the absence of any visible rescue operation, the man's body had been spotted by an American television crew, then laid out beneath a green sheet on a rubble-strewn roadway while an ambulance was summoned. Officials said the extent of the devastation made it impossible for the heavy machinery needed to search for bodies to reach the area.

In a city grown accustomed to the NATO raids, the attacks caused a heightened level of alarm, partly because they began so early in the day, when this capital of 2.5 million people was busy with its daily routines. Most of the nearly 4,000 strike sorties flown by NATO since the air war began in March have been carried out deep into the night, partly, NATO officials have said, to minimize the risk of civilian casualties. But Tuesday's daylight raids emptied much of the city of traffic, with stores in large areas of the city shuttered and the few people out hurrying to complete their business and find shelter.

Colonel Qaddafi's nine-minute audio message was his first public pronouncement in nearly four weeks, when he spoke after an earlier NATO attack on the Tripoli command compound. That message, also delivered in a recorded radio address, struck a defiant posture, telling NATO that he was "in a place where you can't reach me — in the hearts of my people."

Yemeni Leader's Condition Raises Doubts About Rule

BY NEIL MACFARQUHAR

The burns President Ali Abdullah Saleh suffered in an attack may require months to heal, an official said, pointing to an extended absence.

ECONOMIC SCENE The German Example

BY DAVID LEONHARDT

The lessons from Germany's economy aren't liberal or conservative. They are both.

NBC Wins TV Rights to 4 Olympics for \$4.38 Billion

BY RICHARD SANDOMIR

NBC extended its Olympic reign to 2020 as Comcast, its parent company, agreed Tuesday to acquire the rights.

Residents Told to Flee as Arizona Wildfire Spreads to N.M.

BY MARC LACEY

Most people in the vicinity of the Wallow Fire are frantically packing, but a few are hunkering down.

CITY ROOM Republicans Challenge Weiner's Donations

BY RAYMOND HERNANDEZ

Republicans have used the scandal of Representative Anthony D. Weiner to tell Democrats to return donations.

RESTAURANT REVIEW Imperial No. Nine

BY SAM SIFTON

The chef Sam Talbot's large and glittery restaurant at the new Mondrian hotel in SoHo suffers from inconsistency.

Number of Rare E. Coli Cases in U.S. Rose Last Year

BY WILLIAM NEUMAN

A national monitoring system for food-borne illness detected growing sickness from a group of rare E. coli bacteria related to the strain in Germany.

Fed Chairman Sticks With His View of a Slowly Mending Economy

BY BINYAMIN APPELBAUM

Ben Bernanke said Tuesday that the pace of recovery "seems likely" to increase during the rest of the year and he continues to see no evidence of enduring inflation despite recent increases in

Woods to Miss U.S. Open

BY LARRY DORMAN

Still recovering from injuries to his left knee and Achilles' tendon, Tiger Woods said he would not be ready in time.

Pryor Giving Up Senior Season at Ohio State

BY THE ASSOCIATED PRESS

Terrelle Pryor's career at Ohio State, which started with so much promise and potential, came to an abrupt and scandal-ridden end.

In Santa Monica, Circumcision Opponent Abandons Efforts

BY JENNIFER MEDINA

Jena Troutman, the main supporter of a ballot measure to ban circumcision in Santa Monica, says the legislation has been misrepresented as an attempt to impinge on religious

AT WAR BLOG

Public Opinion on the Wars? New Polls Offer Conflicting Evidence

BY JAMES DAO

One new poll finds that most Americans say the war in Afghanistan is not worth fighting, while another shows that Americans are likely to blame the nation's debt on the wars in Afghanistan and Iraq.

GREEN BLOG

A Hybrid Power Plant Takes Shape in Turkey

BY MATTHEW L. WALD

Solar and wind power will supplement natural gas at optimal points during the day at the plant, which will be built in Karaman, Turkey.

A Heckuva Book Pitch. That's Putting It Mildly.

BY JULIE BOSMAN

A mock children's book with an obscenity in the title has become a hit for a small Brooklyn publisher, which now has to gear up for what it hopes will be big sales.





WORLD GOLF TOUR™

147% more in-app
transactions

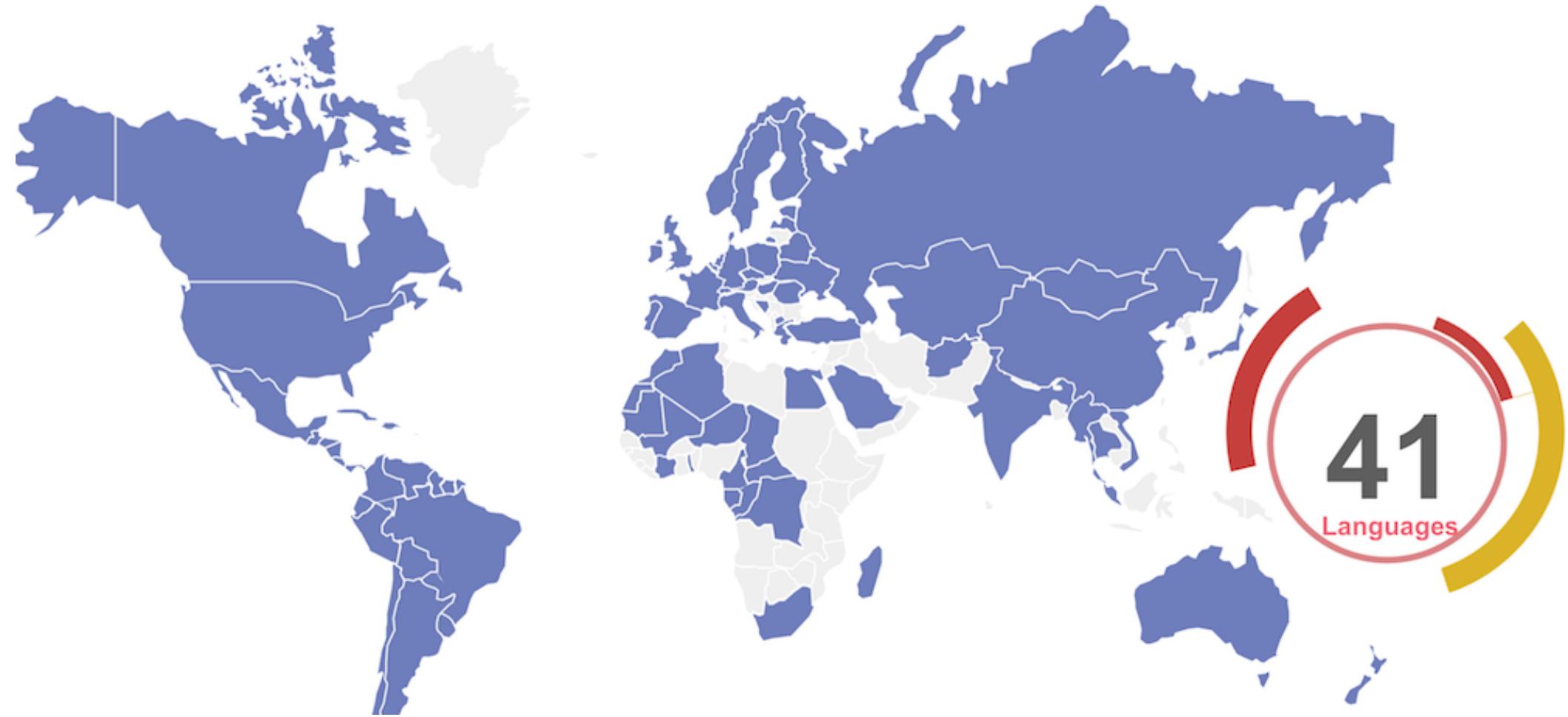


springpad



100% more
engagement





Chrome web store localization





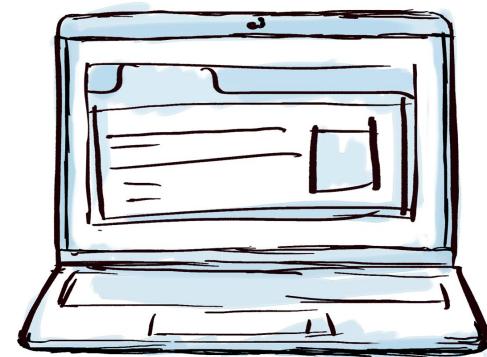
5
0%
No per transaction fees
No monthly fees
No sign up fees
PCI compliance

- No per transaction fees
- No monthly fees
- No sign up fees
- PCI compliance

Chrome Operation System

What is Chrome OS?

Chromebooks are built and optimized for the web, where you already spend most of your computing time.

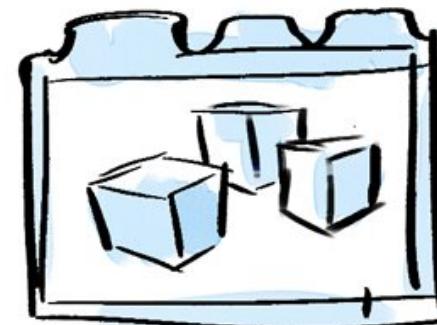


Chrome OS - Three Pillars

speed



simplicity



security

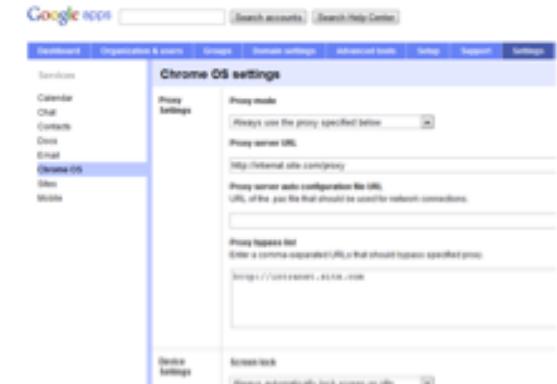
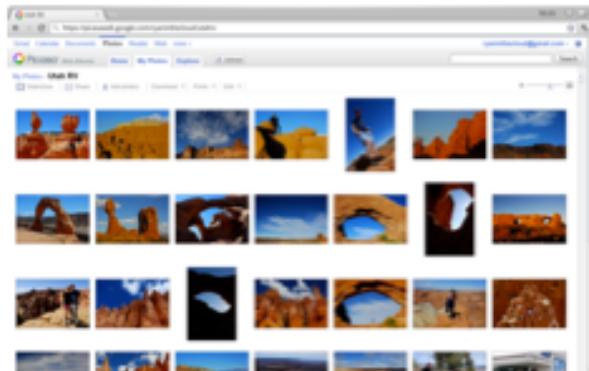


Chrome OS - Speed



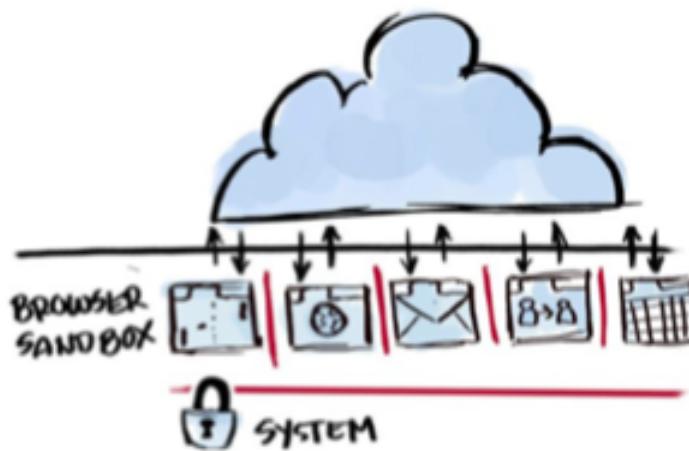
- Fast to start and resume
- Fast to connect, no matter where you are
- Fast to search and navigate the web

Chrome OS - Simplicity



- Everything is sync - files, photos, email etc'.
- Forever fresh - Chromebook get better over time.
- Easy to manage.

Chrome OS - Security



- Defense in depth - The first commercial OS built for security with: layers, sand-boxing, encryption and verified boot.
- Personalized by user.
- Guest mode.



Everything You Need



Connected



Instant



Apps



Always Fresh

User Experience



Start up...



...open a tab...



...log in...



...and you're off!



Chromebook



acer

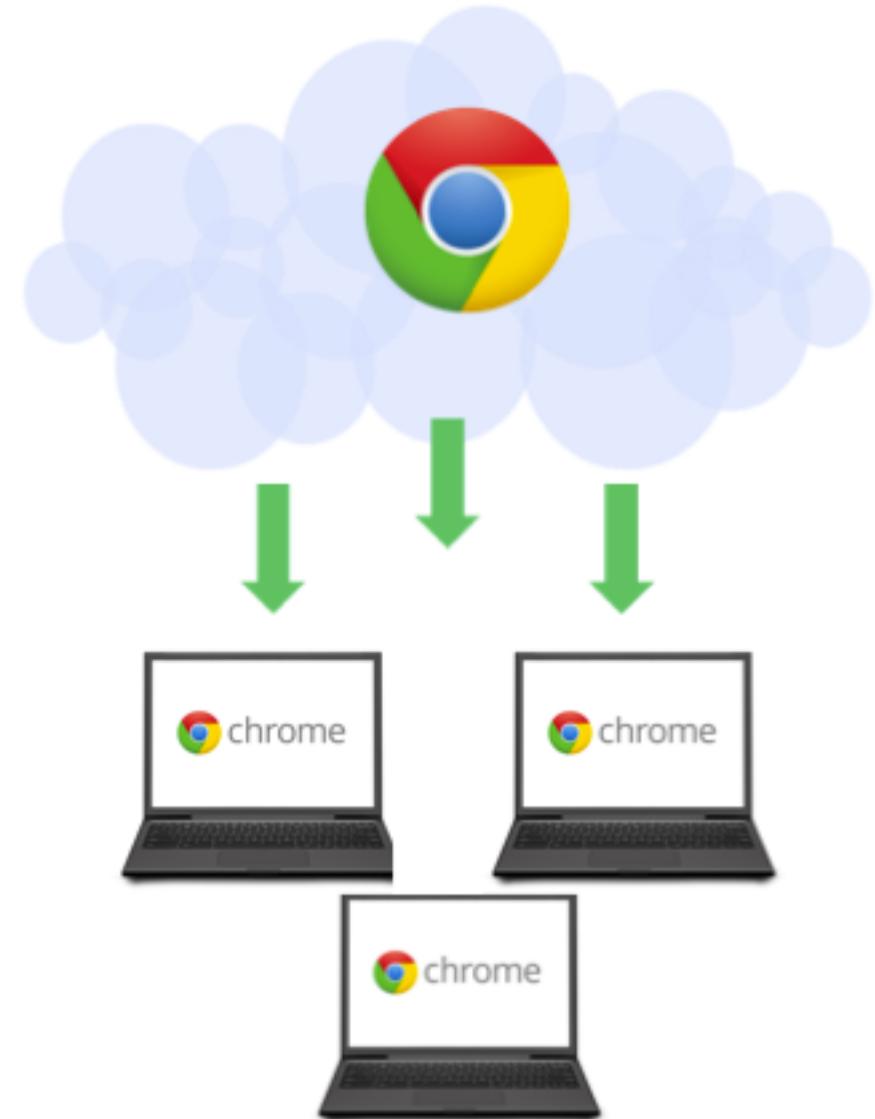


- 8 second boot & Instant on
- 6.5h - 8h battery
- 11.6" - 12.1" display
- Always connected - World 3G card with SIM slot

google.com/chromebook

Management Capabilities

- **Manage a fleet:** Set up and maintain thousands of Chromebooks
- **Useful tools:** Configuration options can enhance existing policies
- **Constantly improving:** New features and tools are being built into the console



Management Console - 1

Google Apps for altostrat.com - Google Apps for Business

Google apps Search accounts Search Help Center

Inbox Calendar Help Sign out

Dashboard Organization & users Groups Domain settings Advanced tools Setup Support Settings

Services

Calendar Chat Contacts Docs Email **Chrome OS**

Google Groups for Business Start Page Sites Video Mobile

sherpatoold (App Engine) altostratserver (App Engine) altostrat-demo (App Engine)

Chrome OS settings

Device Settings

Allow Guest Mode

Restrict sign-in to list of users

Enter a comma-delimited list of usernames who can sign in to the device. Wildcards (*) are allowed.

*@altostrat.com

Proxy Settings

Proxy mode

Proxy server URL

Proxy server auto configuration file URL

URL of the .pac file that should be used for network connections.

Proxy bypass list

Enter a comma-separated URLs that should bypass specified proxy.

Management Console - 2

- Ensure that users are logged out upon idle
- protecting against data leakage between user

User Security Settings	Screen lock Always automatically lock screen on idle
	Policy refresh rate The number of minutes between client policy refreshes. 180 30 - 1440 minutes
Browser Features	Developer Tools Always allow use of built-in developer tools
	3D Content Always allow display of 3D content
	SPDY Protocol Always allow use of SPDY protocol
	Saving Browser History Always save browser history

Management Console - 3

Extensions

Extension IDs to allow

Enter the extension IDs of extensions to allow, separated by commas. [Learn more](#)



Extensions you allow users to install

Extension IDs to block

Enter the extension IDs of extensions to block, separated by commas. [Learn more](#)

```
mcbkbpnkkkipelfledbfocoglcfm, aciahcmjmeclokailenpkdchphgkefd, blpcfgokakmgnkcojhhkbfbldkacnb
```



Extensions to block

Extension to Pre-Install

You must supply both the extension ID and the URL where the extension is posted. For gallery extensions, the URL is <https://clients2.google.com/service/update2/crx>.

For example, to force install of the Gmail Checker Extension, this field should be:

"mihcahmgecmbnbcchbopgniflhgnkff;https://clients2.google.com/service/update2/crx".

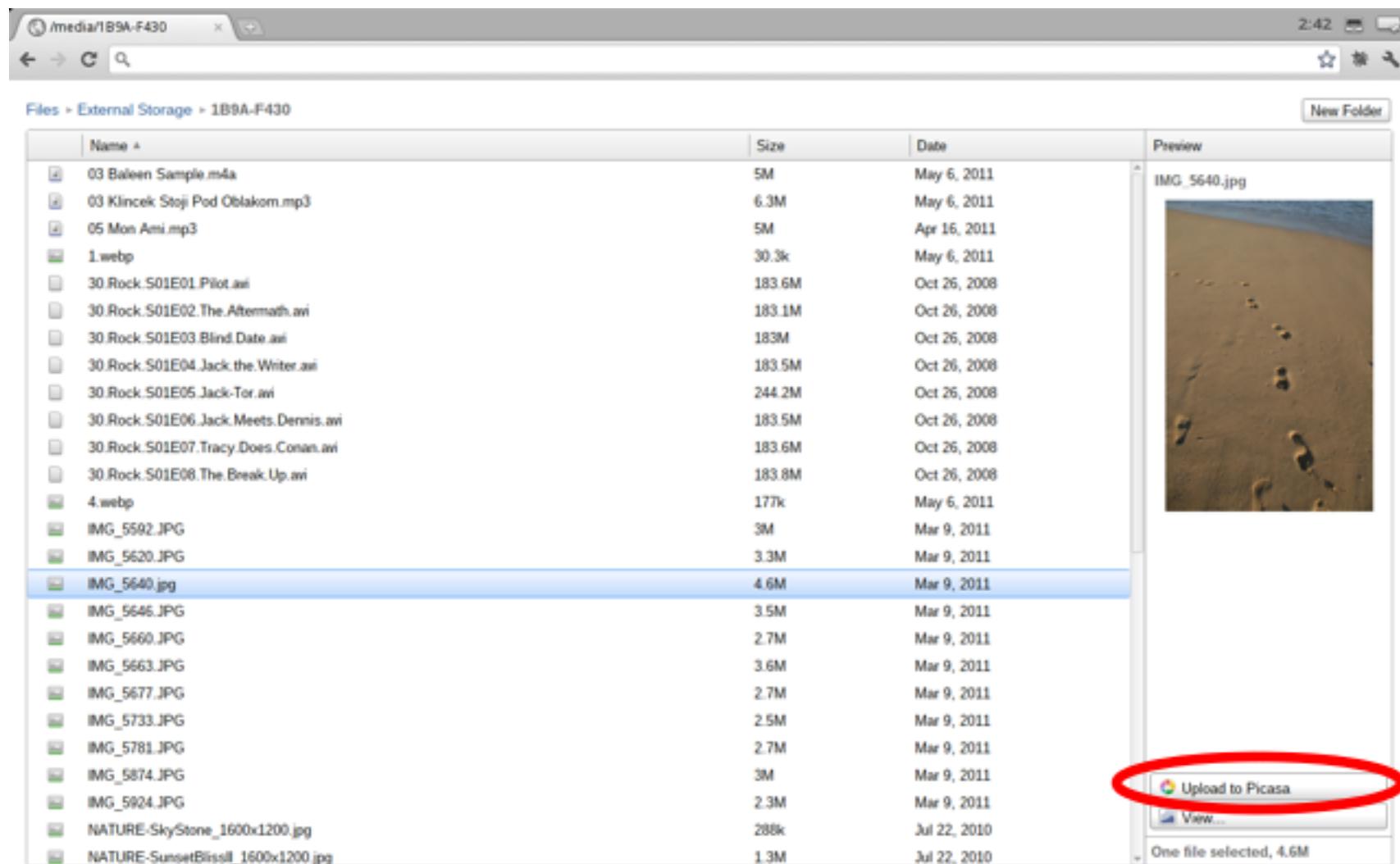
[Learn more](#)



Extensions & apps
that are pre-installed

```
mihcahmgecmbnbcchbopgniflhgnkff;https://clients2.google.com/service/update2/crx,  
idaeealfhcijmeigljaopafdagpijdcb;https://clients2.google.com/service/update2/crx,  
ecmphppfkcfflgcokcbdkgpfegoel;https://clients2.google.com/service/update2/crx,  
hbgbjifjkcegiohpiliaccnkjklkgde;https://clients2.google.com/service/update2/crx,  
aoaanlcengnoejadodnhjjiopbjfdnrb;https://sites.google.com/a/altostrat.com/chrome-os-demo/extension
```

chrome.fileBrowserHandler



File API - Manifest

Declare the "fileBrowserHandler" permission in the extension manifest, and use the "file_browser_handlers"

```
{ "name": "Upload to flickr", ...
"file_browser_handlers": [ { "id": "upload",
"default_title": "Save to flickr", // What the button will
display "file_filters": [ "filesystem:*.jpg", "filesystem:*.jpeg",
"filesystem:*.png" ] } ], "permissions" : [
"fileBrowserHandler" ], "icons": { "16": "icon16.png",
"48": "icon48.png", "128": "icon128.png" } }
```

File Uploader JS Example

```
uploadFile: function(file) { var pro1 = document.  
querySelector('#pro1'); var progressBar = pro1.  
querySelector('progress'); var formData = new  
FormData(); formData.append('file', file); var xhr = new  
XMLHttpRequest(); xhr.open('POST', this.  
uploadServer, true); xhr.onload = function(e) { if (this.  
status == 200) { console.log(this.response); alert("The  
image is safe in Flickr " + this.response); } }; xhr.  
onerror = function(e) { console.log(this, this.status,  
this.responseText, this.getAllResponseHeaders()) };  
xhr.send(formData); }, ...
```



Chromebook - Things to try

- Set up in less than a minute - log in and everything is there: bookmarks, extensions, documents, apps etc'
- Boots in less than 8 seconds. Resumes instantly.
- Install a new app: edit videos, track expenses, build presentation...



Chromebook - Things to try

- Share your photos instantly.

Insert an SD card or USB stick, select the photos and post them with one click.

- Listen to audio or watch a movie.

Stream audio and video from the web.

If you have media on SD/USB - it will handle it too.

- Read the FT.com offline.

And then the New York Times or play Angry Birds.



Chromebook - Recap

- Easy to manage
- Security
- Dramatically lower cost
- Painless migration
- One-stop Shop





Chromebook - Recap

- Samsung or Acer Chromebooks
- Web-based management console
- 3-year warranty, service, and support
- New Chromebooks every 3 years

Happy IT managers and end users



Q & A



Thank you!

Feedback -> bit.ly/html5-lon-f



<http://plus.ly/greenido>



greenido.wordpress.com