



Web Fonts are changing the Web. Learn why.

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May 10, 2011

Logistics

Moderator:

<http://goo.gl/mod/dDG1>

· **Feedback:**

<http://goo.gl/YeEK0>

· **Hashtags:** #GoogleFonts

#Chrome

#io2011

The Next 45 Minutes

1. Web Fonts "Crash Course"
2. Google Web Fonts
3. Trends
4. What's Next?
 - More Fonts
 - Faster Fonts
 - In More Places

1. Web Fonts "Crash Course"



Arial

Courier New

Georgia

Times

Verdana

Trebuchet

The state of
web typography

The ugly "work-arounds"

1. Embedding text in images

- Not semantic
- Not selectable
- Not zoomable

2. Flash™ Replacement Techniques

- Requires a plugin
- Flash of un-styled text
- Selection feels odd

The solution is Web Fonts



- Semantic
- Translatable
- Accessible
- Zoomable
- Efficient





```
@font-face {  
  font-family: 'Droid Sans';  
  font-style: normal;  
  font-weight: normal;  
  src: url('DroidSans.eot');  
  src: local('DroidSans'),  
    local('DroidSans'),  
    url('DroidSans.woff') format('woff'),  
    url('DroidSans.ttf') format('truetype');  
    url('DroidSans.svg#DroidSans') format('svg');  
}
```

@Font-face pitfalls

1. Font file conversion
2. Hosting
3. CSS maintenance
4. Browser quirks
5. Licensing complexities

2. Google Web Fonts



Google Web Fonts lets you browse all the fonts available via the [Google Web Fonts API](#). All fonts in the directory are available for use on your website under an open source license and are served by Google servers.

Follow us:  

Arabic Cyrillic Greek Khmer **Latin**

Sorting: **Popularity** ▾ Filter: **All** ▾

Droid Sans by Steve Matteson **2 variants**

Droid Sans



PT Sans by multiple designers **3 families**

PT Sans



Droid Serif by Steve Matteson **4 variants**

Droid Serif



Yanone Kaffeesatz by Yanone **4 variants**

Yanone Kaffeesatz



Ubuntu by multiple designers **8 variants**

Ubuntu





Google web fonts
beta

- Google handles the browser quirks
- No licensing worries
- Speed and reliability
- Font updates, optimizations & quality improvements
- Innovative font serving features

Lekton by multiple designers **3** variants

Lekton

Bevan by Vernon Adams

Bevan

Architects Daughter by Kimberly Geswein

Architects Daughter

Expletus Sans by Jasper de Waard **4** variants

Expletus Sans

Nova by Wojciech Kalinowski **8** families

Nova

League Script by Haley Fiege

League Script

PT Serif by multiple designers **2** families

PT Serif

Astloch by Dan Rhatigan **2** variants

Astloch

Amaranth by Gesine Todt

Amaranth

Philosopher by Jovanny Lemonad

Philosopher

Bangers by Vernon Adams

BANGERS

Six Caps by Vernon Adams

SIX CAPS

VT323 by Peter Hull

VT323

Miltonian by Pablo Impallari **2** families

MILTONIAN

Anonymous Pro by Mark Simonson **4** variants

Anonymous Pro

Terminal Dosis Light by multiple designers

Terminal Dosis Light

Indie Flower by Kimberly Geswein

Indie Flower

EB Garamond by Georg Duffner

EB Garamond

Cabin Sketch by Pablo Impallari

Cabin Sketch

Oswald by Vernon Adams

Oswald

Crafty Girls by Tart Workshop

Crafty Girls

Just Me Again Down Here by Kimberly Geswein

Just Me Again Down Here

Pacifico by Vernon Adams

Pacifico

Buda by Adèle Antignac

Buda

MedievalSharp by Wojciech Kalinowski

MedievalSharp

Radley by Vernon Adams

Radley

PT Sans by multiple designers **3** families

PT Sans

Old Standard TT by Alexey Kryukov **3** variants

Old Standard TT

Sniglet by Haley Fiege

Sniglet

Cherry Cream Soda by Font Diner

Cherry Cream Soda

Cabin by Pablo Impallari **8** variants

Cabin

Pacifico

Philosopher

PERMANENT
MARKER

Arvo

1. Include the CSS

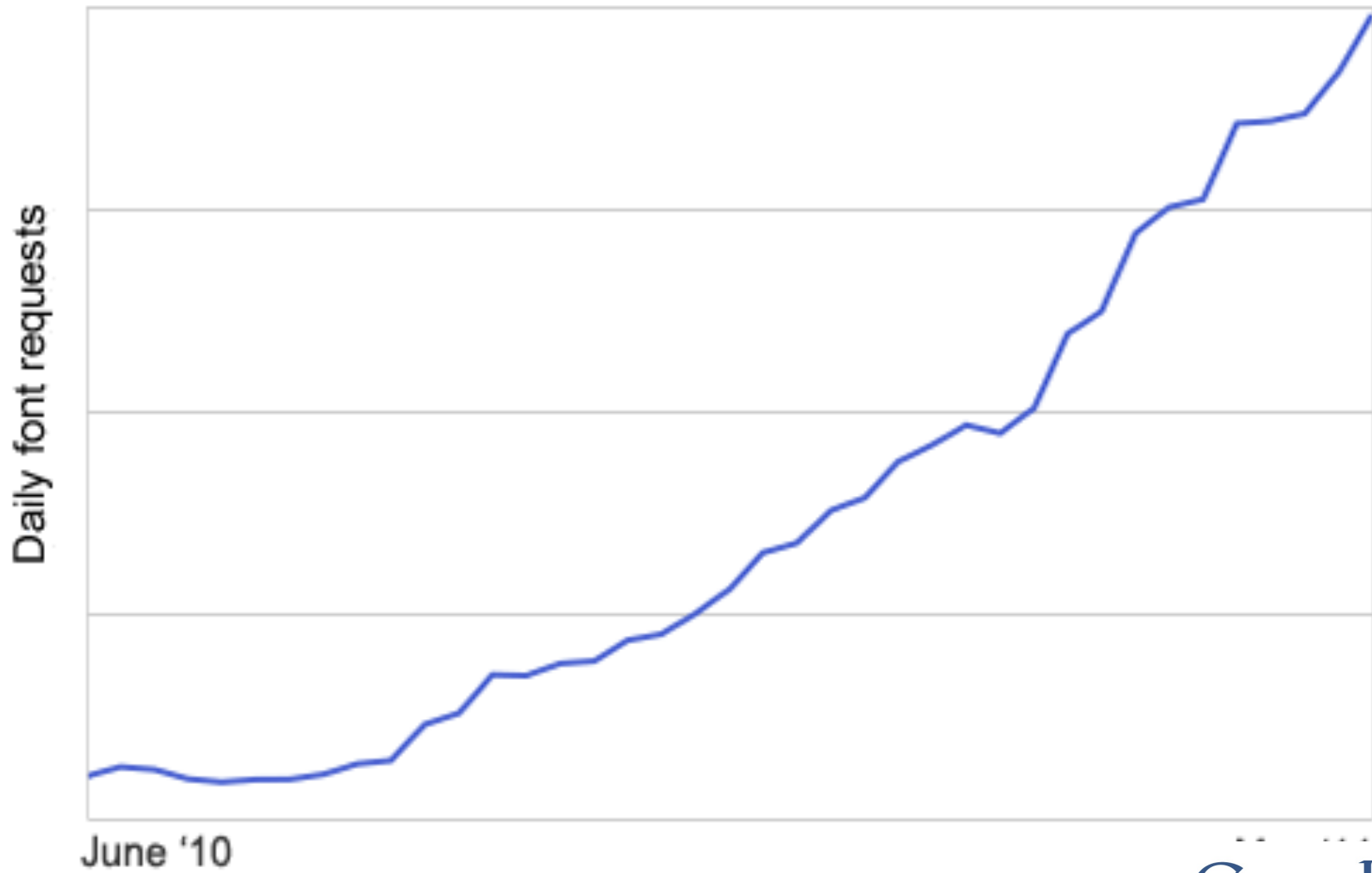
```
<link href='http://fonts.googleapis.com/css?family=Arvo'  
rel='stylesheet' type='text/css'>
```

2. Use the font family as you would any font

```
h1 { font-family: 'Arvo', arial, serif; }
```

3. Trends

Google Web Fonts - Growth



We're happy to announce that recently we hit

110,000,000

font requests per day. That's across

1.29 million


unique domains and

30%

m/m growth



Google 

Google 
Academia

Google 
Academia

Google 

Sandbox Exhi



Coming to London?

Search

The Royal Wedding Prince William & Catherine Middleton

[CLICK HERE TO LEAVE A PERSONAL MESSAGE FOR WILLIAM AND KATE](#)



LIMITED EDITION BOXSET NOW AVAILABLE

The Limited Edition Royal Wedding Boxset is now available to order from the Universal Music store

[CLICK HERE NOW!](#)

The Royal Palace
26th April 2011

The wedding at the Palace and Queen. Find all the cakes that link below



Tags: royal

- Beauty & Lifestyle
- Business & Finance
- Cars & Transportation
- Celebrities
- Coupons & Deals
- Education
- Food & Drink
- Health
- Hobbies & Games
- How To
- Humor
- Jobs
- Language
- Movies & Television
- Music
- News
- Parenting
- Sports & Fitness
- Taxes
- Technology & Internet
- Travel
- Video
- Video Games



Go homemade this Valentine's Day

A scrapbook is easy, fun, and affordable to make. Surprise your love with a collage of their favorite photos and preserve your memories together for years to come.



Get 3 stars on every level of Angry Birds



Go homemade this Valentine's Day



Survive in the wilderness



Become a blackjack dealer

HOBBIES & GAMES



Crafts to help kids' creativity

More than a way to entertain, crafting helps children develop skills, like cooperation, hand-eye coordination and creativity.

topics: [kids](#), [parenting](#)

2 ? 3

HOBBIES & GAMES



How to fish for salmon

Catching salmon is among the greatest challenges for every seasoned fisherman. The correct technique and equipment, along with patience and practice, can help you claim the upper hand.

topics: [salmon](#), [fishing](#), [boats](#)

- [How to fillet salmon](#)
- [How to grill salmon](#)

4 ? 2

HOBBIES & GAMES



There are a million clever uses for duct tape!

You can make anything from airplanes to prom dresses with this magical adhesive substance. See what people use duct tape for and get ideas for your next silvery smooth creation!

topics: [duct tape](#), [duct tape clothing](#), [tape](#)

2 ? 3

HOBBIES & GAMES







HOBBIES & GAMES



Find, create, and publish Open Source software for free

3,191,038 downloads today

<p>odt2braille </p> <p>odt2braille is a Braille extension to OpenOffice.org Writer. odt2braille enables authors ... Read more.</p> <p>Project of the Month</p>	<p>Azureus / Vuze</p> <p>Vuze (formerly Azureus) is a P2P file sharing client using the bittorrent protocol. Search and download torrent</p> <p>Filesharing</p>	<p>PeaZip </p> <p>Cross-platform file and archive manager. Features volume spanning, compression, authenticated</p> <p>Backup</p>	<p>Angry IP Scanner</p> <p>Angry IP scanner is fast and friendly network scanner for Windows, Linux, and Mac. It is very extensible, allowing it</p> <p>Security</p>
<p>ScummVM</p> <p>ScummVM is a cross-platform interpreter for several point-and-click adventure engines. This</p> <p>Games</p>	<p>Chicken of the VNC</p> <p>Chicken of the VNC is a VNC client for Mac OS X. A VNC client allows one to display and interact with a</p> <p>System Admin.</p>	<p>PDF Split and Merge </p> <p>PDF Split and Merge is an easy to use tool to merge and split pdf documents. Console and GUI versions</p> <p>Business</p>	<p>XBMC Media Center </p> <p>XBMC Media Center is a free cross-platform media player software and entertainment system</p> <p>Audio/Video</p>

Hey Open Source Developers: Researchers Want Your Opinion!

Occasionally we get requests for assistance in research projects about open source, and this one is particularly interesting. A team at the Berkman Center for Internet and Society at Harvard and Sciences Po is conducting research on Internet users (in this case, open source software developers). Researchers Yann Algan and Yochai Benkler tell us that "this

[Read more from our blog](#)

@sourceforge

Hey Open Source Devs on SF.net: Researchers want your opinion! <http://ht.ly/4N2in>

 these calls to open source dead gadgets! <http://ht.ly/4Me4t> and <http://ht.ly/4Me7W> What would you open source?

Our very own [@rick446](#) will be talking about [sf.net](#) and mongodb at #mongosf 2011 (<http://bit.ly/k9Agtz>). Early bird reg ends tomorrow!

OOH, FreeNAS 8 released, and a new shiny website, too. Congrats, guys! <http://freenas.org/about/news/item/freenas>

The cloud-optimized networks of tomorrow run on Brocade Ethernet fabrics today.

Assess Your Cloud Readiness.

[DOWNLOAD FORRESTER® STUDY »](#)

 BROCADE

The logo for NORAD Tracks Santa. The word "NORAD" is in large, green, 3D block letters with a globe as the letter 'O'. A small "SM" trademark symbol is to the right. Below "NORAD" is a red ribbon banner with the words "TRACKS" and "SANTA" in white, separated by a small crest. The background of the entire image is a snowy winter scene with mountains, trees, and falling snow.

NORADSM TRACKS SANTA

A 3D rendered Santa Claus character with a white beard, wearing a red suit with white trim and a red hat with a white pom-pom. He is standing on a snowy surface, gesturing with his right hand towards the background. The background shows a snowy landscape with mountains, trees, and a small village with houses and a train.

Welcome to NORAD Tracks Santa

Santa has completed his flight this year.
Come back next December to see him fly
again!



4. What's Next?



More Fonts

Plans to grow the library and build a better browse UX



Faster Fonts

New and exciting font serving technologies



In More Places

The tools you use, everyday.

More Fonts

More Fonts

Ensure content creators have the font selection they need to express themselves, and to build semantic and efficient pages and applications.



More Fonts

Font additions

- From 18 to 175
- We're aiming for 1,000 within 12 months
- Follow @googlefonts

Source

- 45+ font designers across the globe.
- Mostly built from scratch, optimized for the screen.

License

- Open Source is critical to our mission.



Lobster

More Fonts

Font additions

- From 18 to 175
- We're aiming for 1,000 within 12 months
- Follow @googlefonts

Source

- 45+ font designers across the globe.
- Mostly built from scratch, optimized for the screen.

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v1

Google web fonts beta

Tools & Documentation

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Follow us:

Arabic | Cyrillic | Greek | Khmer | Latin

Sorting: Popularity Filter: All

Droid Sans by Steve Matteson 2 variants

PT Sans by multiple designers 3 families

Droid Serif by Steve Matteson 4 variants

Yanone Kaffeesatz by Yanone 4 variants

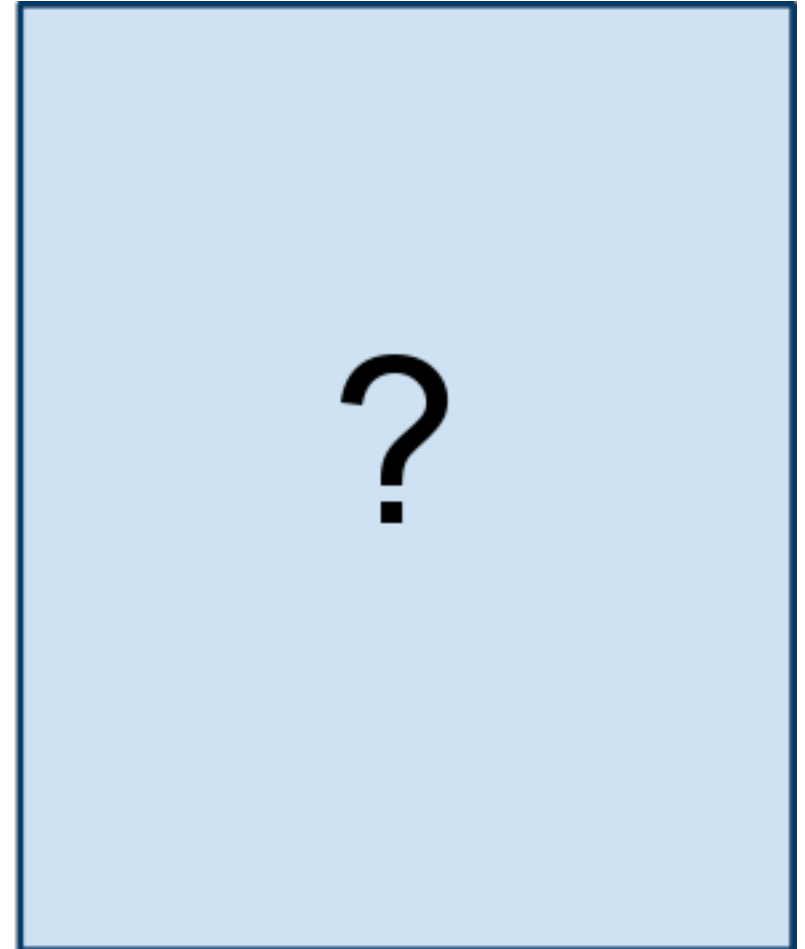
Ubuntu by multiple designers 6 variants

Didact Gothic by Daniel Johnson

Judson by Daniel Johnson 3 variants



v2



Faster Fonts

A logo case study

- One of many use cases for fonts
- Many logos are primarily text
 - Other use cases (nav, headers) require many images
 - Many logos need cool graphics



Text-as-image

- How most people do it now
- Image is 7.3k bytes (optimized)
- Not searchable or zoomable



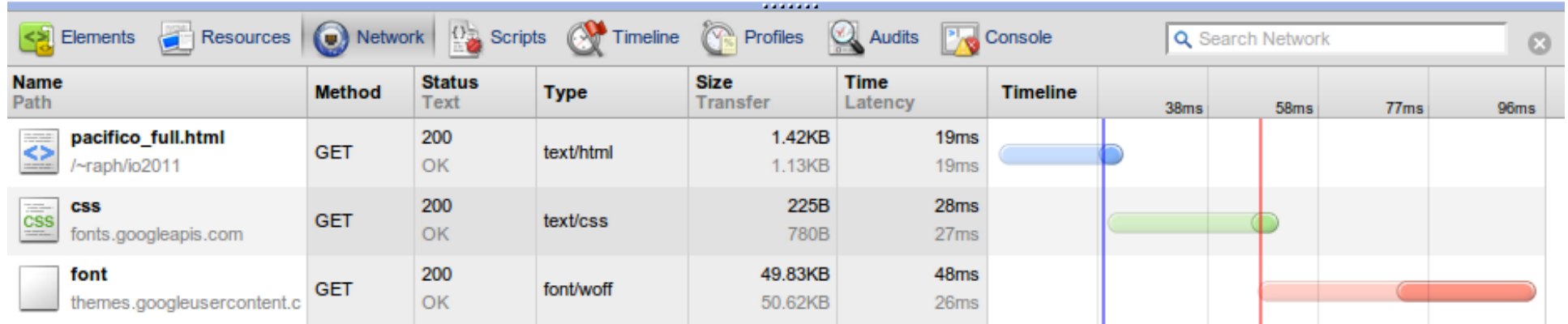
Rendered entirely using web fonts




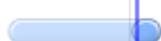

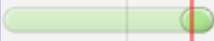


50k

Fonts used

- Pacifico



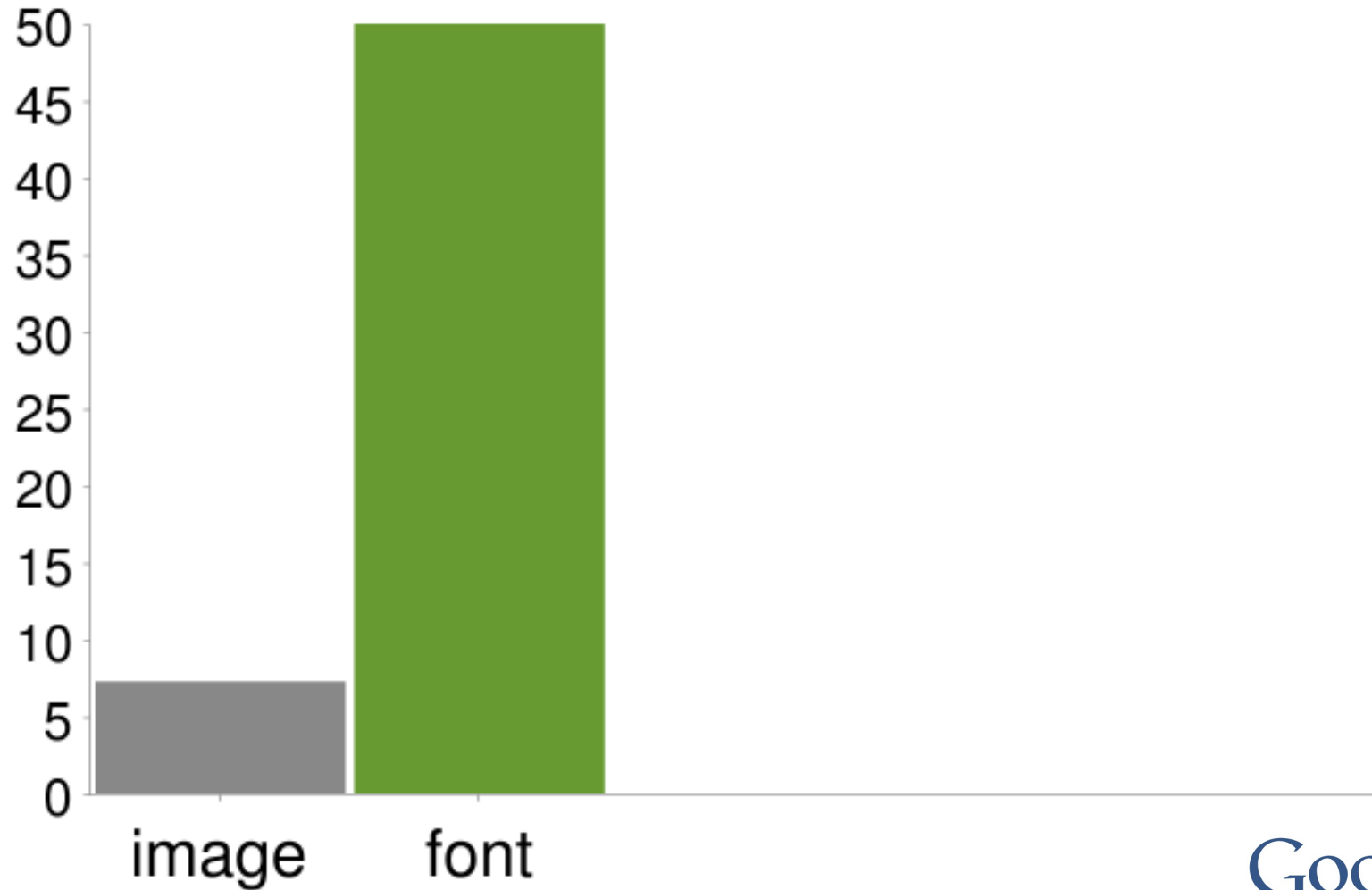
A screenshot of the Chrome DevTools Network tab showing three network requests. The table below summarizes the data from the screenshot.

Name Path	Method	Status Text	Type	Size Transfer	Time Latency	Timeline
 pacifico_full.html /~raph/fo2011	GET	200 OK	text/html	1.42KB 1.13KB	19ms 19ms	
 css fonts.googleapis.com	GET	200 OK	text/css	225B 780B	28ms 27ms	
 font themes.googleusercontent.c	GET	200 OK	font/woff	49.83KB 50.62KB	48ms 26ms	

fonts.googleapis.com/css?family=Pacifico

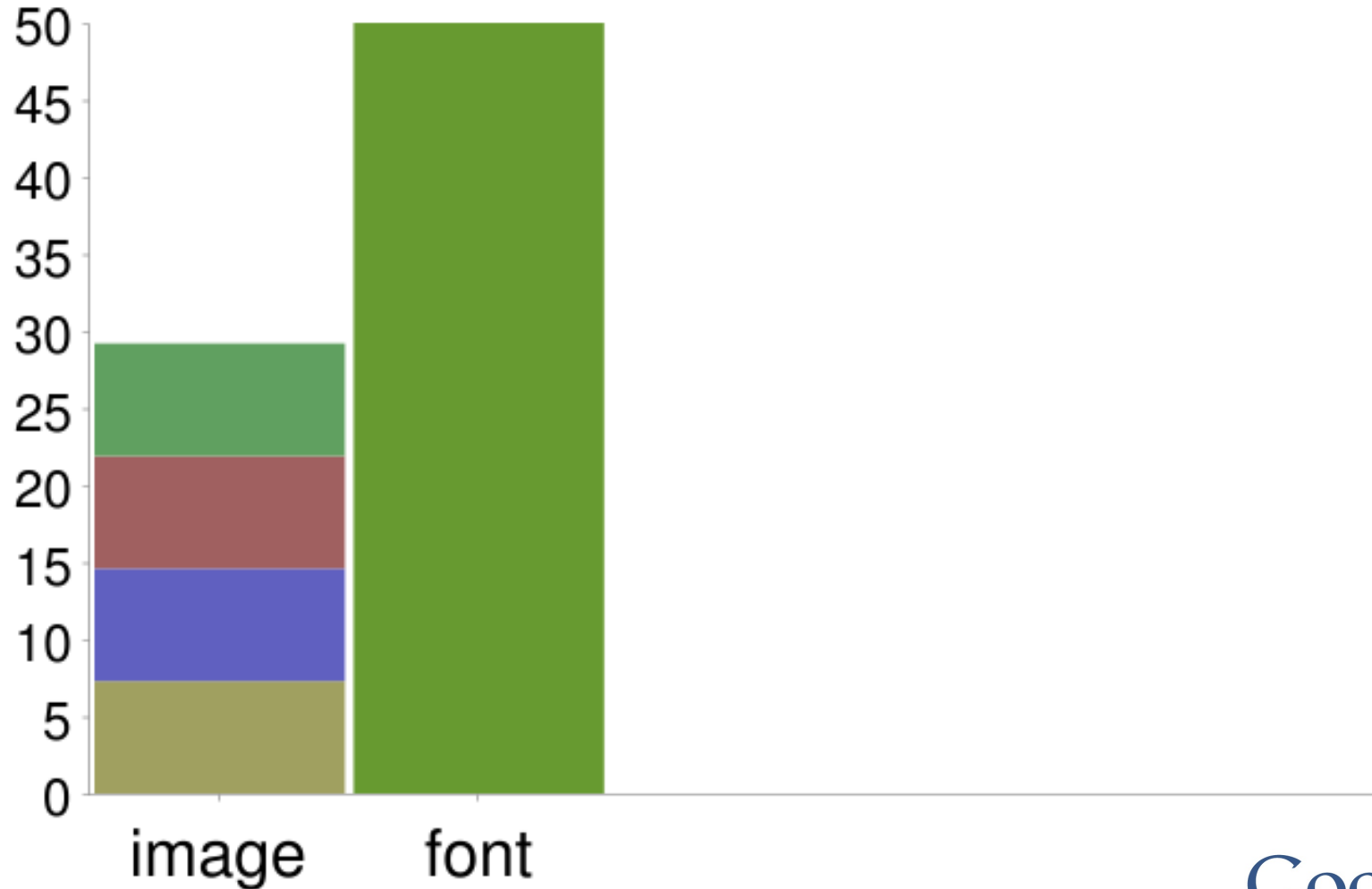
Making web fonts fast

Size in K



Making web fonts fast

Size in K



Metadata for Windows rendering

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>

Mac + Android + iOS optimized



29k

Fonts used

- Pacifico

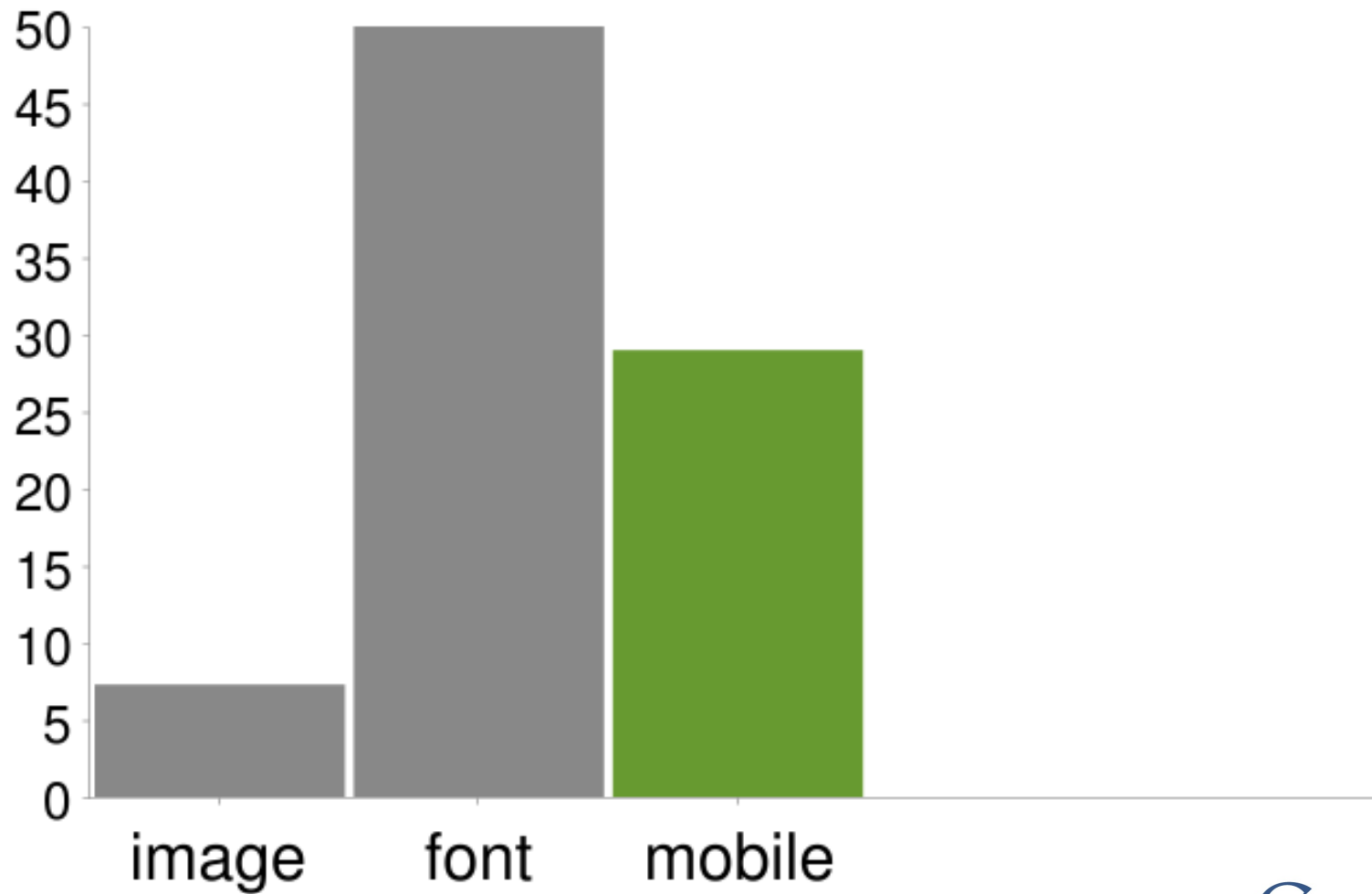
A screenshot of the Chrome DevTools Network tab showing three network requests. The table below summarizes the data from the screenshot.

Name Path	Method	Status Text	Type	Size Transfer	Time Latency	Timeline	57ms	85ms	113ms	142ms
pacifico_full.html /~raph/io2011	GET	200 OK	text/html	1.42KB 1.13KB	52ms 51ms					
css fonts.googleapis.com	GET	200 OK	text/css	225B 780B	31ms 30ms					
font themes.googleusercontent.com	GET	200 OK	font/woff	28.58KB 29.36KB	54ms 30ms					

fonts.googleapis.com/css?family=Pacifico

Making web fonts fast

Size in K



Why send the whole font?

- We're only using 10 characters (out of 232)
- What if we could ask for just the ones we needed?

text=

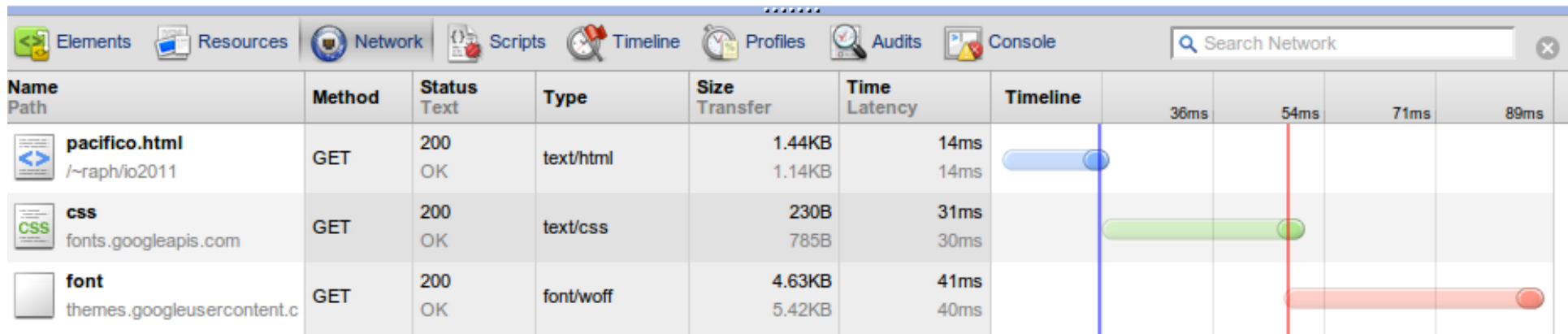
Rendered using web fonts and text=



4.6k

Fonts used

- Pacifico

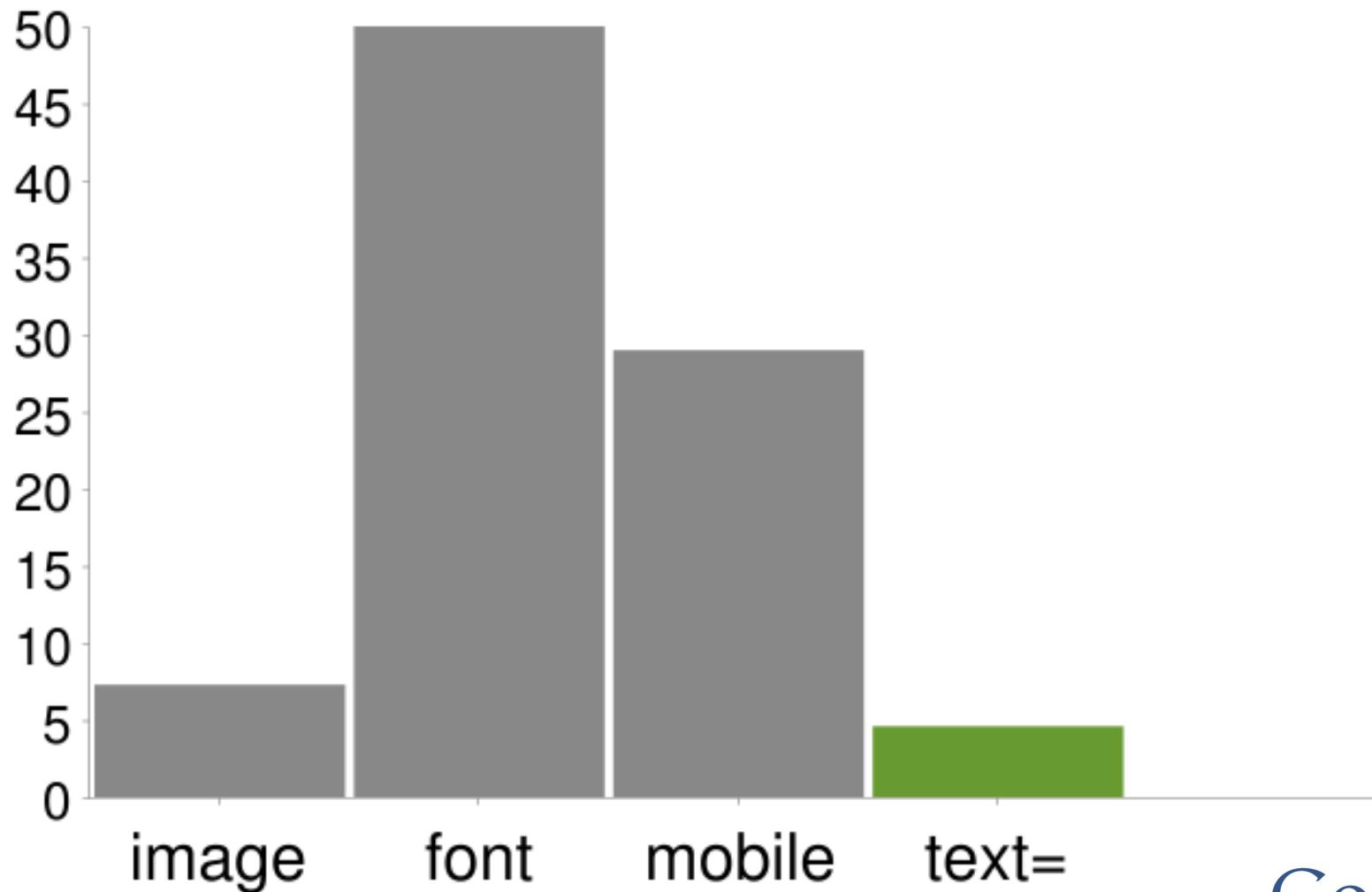


Name	Method	Status	Type	Size	Time	Timeline
Path		Text		Transfer	Latency	
pacifico.html /~raph/io2011	GET	200 OK	text/html	1.44KB 1.14KB	14ms 14ms	
css fonts.googleapis.com	GET	200 OK	text/css	230B 785B	31ms 30ms	
font themes.googleusercontent.c	GET	200 OK	font/woff	4.63KB 5.42KB	41ms 40ms	

fonts.googleapis.com/css?family=Pacifico&text=PacificoSurf

Making web fonts even faster

Size in K



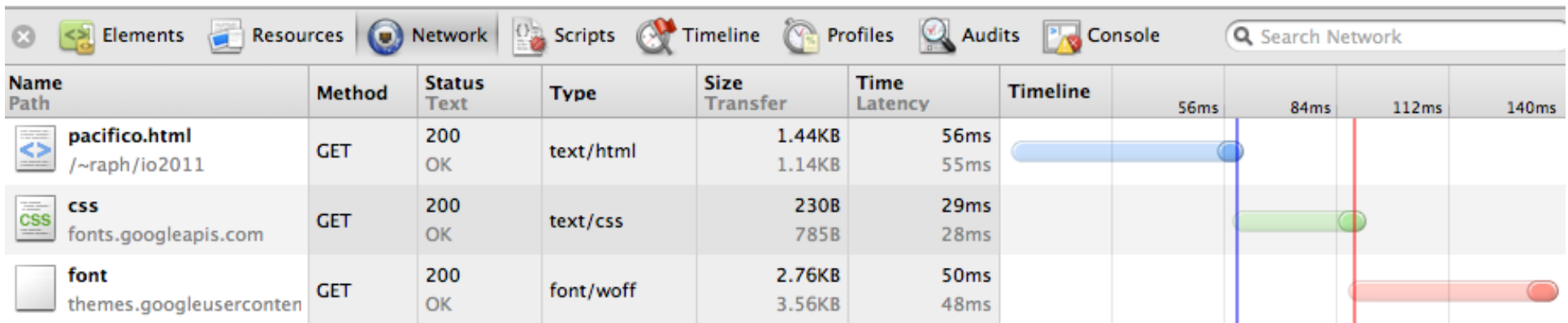
Both optimizations together




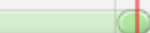

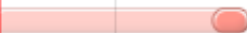


2.8k

Fonts used

- Pacifico

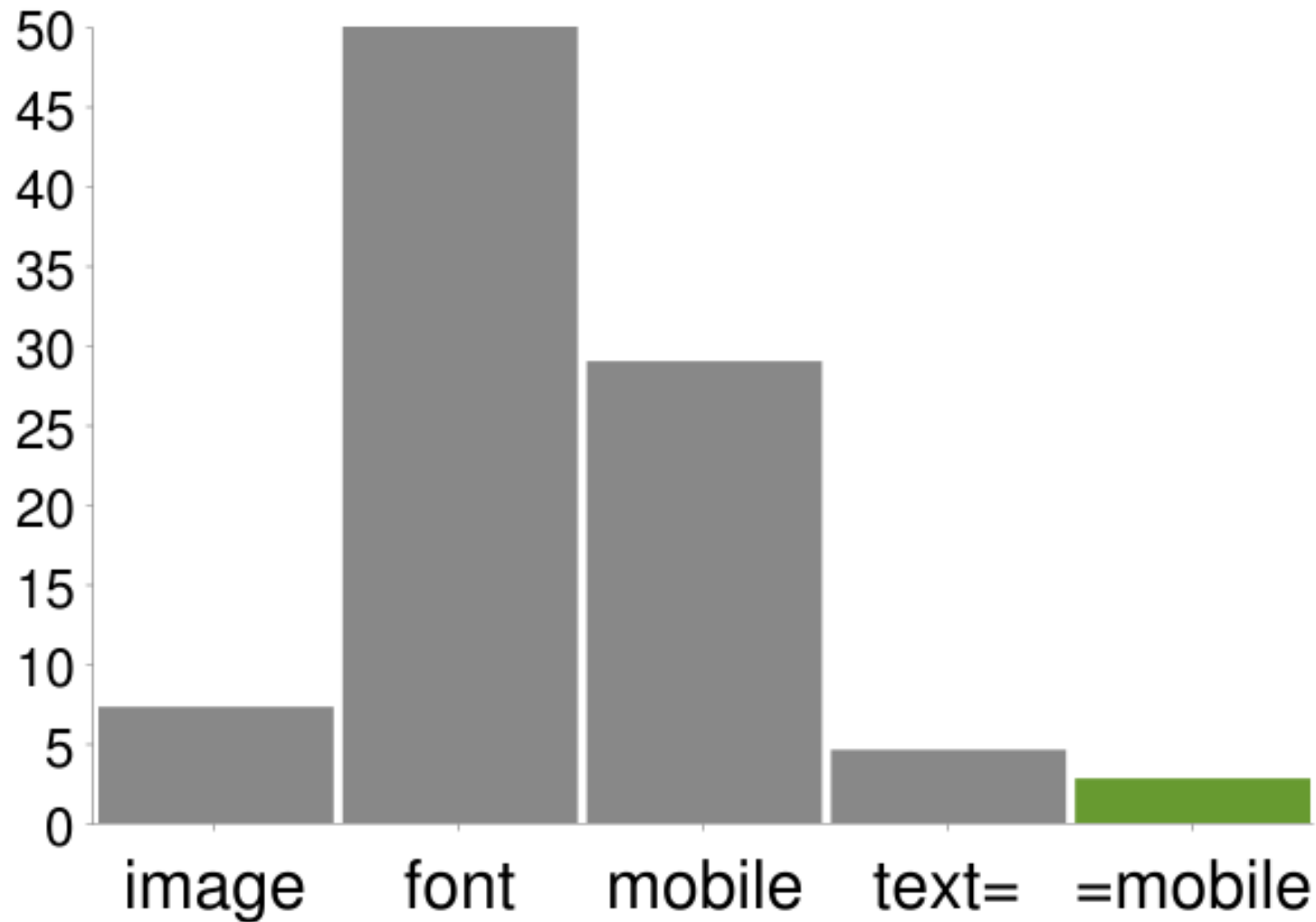
A screenshot of the Chrome DevTools Network tab showing three network requests. The table below summarizes the data from the screenshot.

Name Path	Method	Status Text	Type	Size Transfer	Time Latency	Timeline	56ms	84ms	112ms	140ms
 pacifico.html /~raph/io2011	GET	200 OK	text/html	1.44KB 1.14KB	56ms 55ms					
 css fonts.googleapis.com	GET	200 OK	text/css	230B 785B	29ms 28ms					
 font themes.googleusercontent.com	GET	200 OK	font/woff	2.76KB 3.56KB	50ms 48ms					

fonts.googleapis.com/css?family=Pacifico&text=PacificoSurf

Making web fonts even faster

Size in K



Further benefits of text=

- Fast, especially for mobile
- One font for all the text uses
 - Menus, navigation, headlines, etc.
 - images would require one image per usage
- Works for international
 - Multilingual fonts can be very large
 - Key for worldwide adoption

Making web fonts fast

- Maximal caching
 - Across sites
 - Popular fonts are already in user's cache
- Maximal font compression
 - WOFF (on modern browsers)
- Size optimization for Mobile + Mac
- New text= feature
- Served from Google's worldwide infrastructure

Faster Fonts

- We're hard at work building the fastest infrastructure possible
- Integration is very easy and quick
- You don't need to do any work

In More Places

In More Places



Announcing the

Google Web Fonts Developer API

Currently in Trusted Tester



In More Places



Quick Summary

1. Web Fonts "Crash Course"
2. Google Web Fonts
3. Trends
4. What's Next?
 - More Fonts
 - Faster Fonts
 - In More Places

Questions: <http://goo.gl/mod/dDG1>

Feedback: <http://goog.gl/YeEK0>

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@GoogleFonts

@DavidWurtz

@Raphlinus

@TypeDNA

#GoogleFonts #Chrome #io2011