Preparation: warning broken users

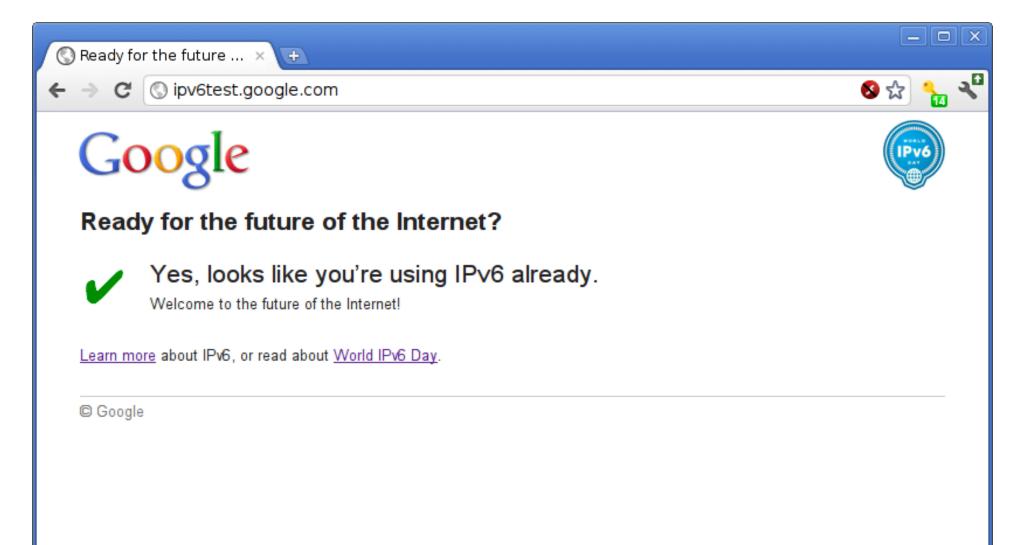
😂 🕙 🔹 😵 Cole 🔩 IPvé 🧠 Dre 😴 Beg 🚍 Gen 😵 how 💽 Hov 🥵 RFC 🔝 drai 🛄 drai 🔛 drai 🎥 c+a 🔩 Saw 🗞 bor
← → C ③ ipv6.google.com
The Internet needs more addresses! That's why Google and other websites are testing a new protocol, IPv6, on June 8. Uh-oh. Your connection may not be ready. Try it now
+Erik Web Images Videos Maps News Mail more -



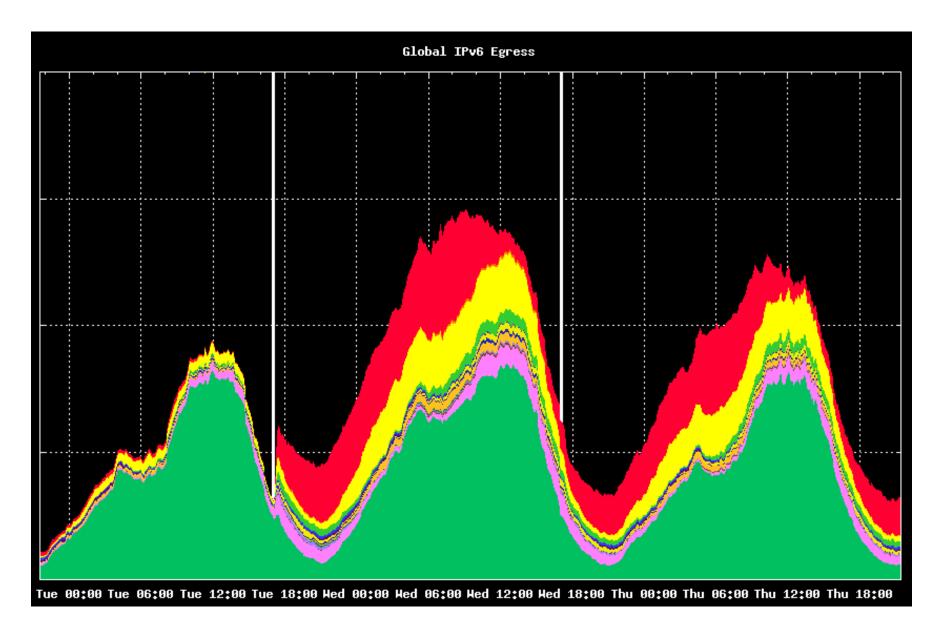
Google Search I'n

I'm Feeling Luc

Preparation: ipv6test.google.com



On the day: business as usual



We were already serving 60% of the IPv6 Internet

Technical progress

A number of services became available over IPv6

 Voice, talk, mobile talk, analytics, tools, ...
 Google Public DNS - 2001:4860:4860::{8888,8844}
 Adwords and IMAP/SMTP (soon after the day)
 Almost all Google services now available over IPv6

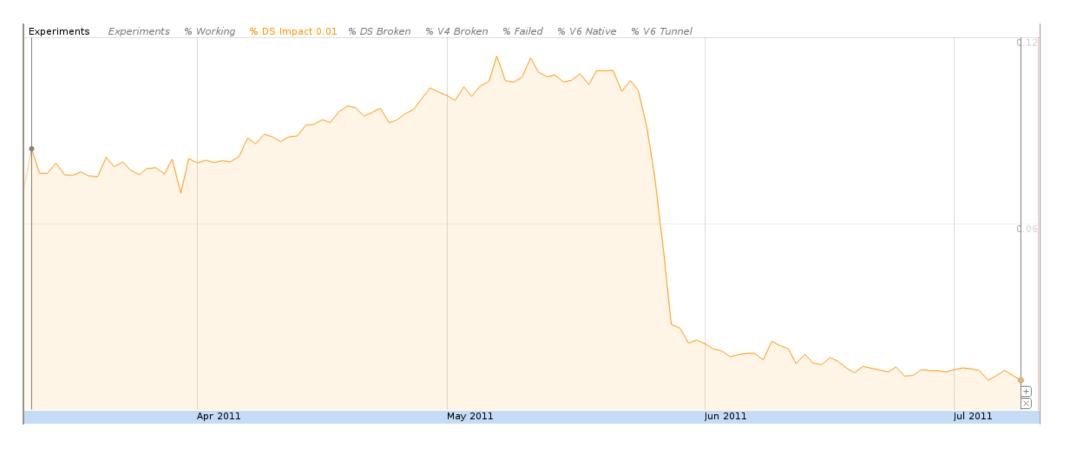
- Some services left IPv6 on for everyone
 YouTube videos, mobile gtalk
- Implemented fast fallback from IPv4 to IPv6 in Chrome

IPv6 brokenness (excluding Chrome)

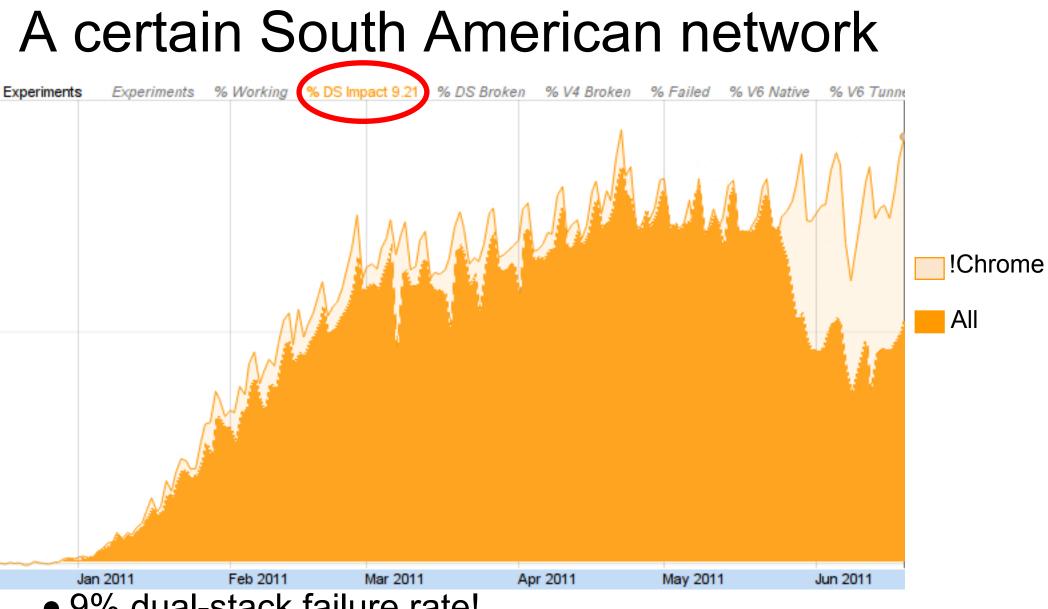


No change around World IPv6 Day

Chrome IPv6 Brokenness

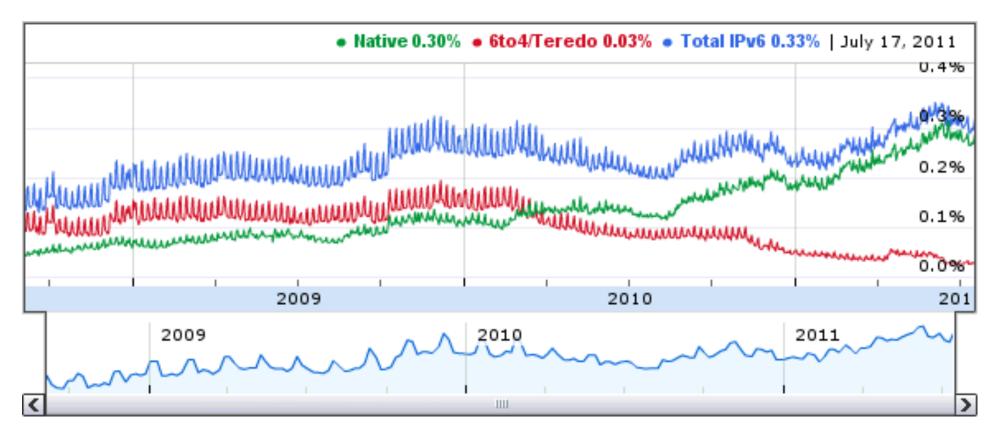


- 80-90% reduction in dual-stack brokenness
- Versions with fast-fallback 99.995% as reliable as IPv4
- Similar behaviour will be in Firefox 7
- Apple also added robustness in OS X Lion
- If IE follows suit, users with recent browsers should be OK



- 9% dual-stack failure rate!
- We told them there was a problem, but they don't see it...
- ... even on World IPv6 Day
- Responsible for almost half the brokenness on the Internet

Adoption



• Still 0.3%

France 3.4%, Japan 1.4% (since May)

- Without France and Japan, 0.1%
- Japan only joined the game recently

KDDI



IPv6 to 15% of their users in 5 weeks!
Just in time for World IPv6 Day

Japan as a whole



- Native users ~= KDDI
- Lots of broken users too. NGN?