Since last we met...

George Michaelson Geoff Huston APNIC Labs November 2015

The June 2015 Ad Campaign

- Flash Only
- No TLS support
- Almost no Mac Support
- Almost no Mobile support
- Used FreeBSD + metal measurement platforms

Mostly Windows systems, with a smattering of Android, and a small amount of Mac OS X and iOS

RIP Flash

Google and Mozilla pull the plug on Adobe Flash: Tech giants disable the program on browsers following 'critical' security flaw

- Leaked documents recently revealed Adobe Flash has a serious flaw
- Vulnerability lets hackers take over a user's computer and install malware
- Despite various patches and attempts at fixes, there are still security risks
- Google and Mozilla have now pulled support for the plugin on browsers

By VICTORIA WOOLLASTON FOR MAILONLINE

PUBLISHED: 22:17 EST, 14 July 2015 | UPDATED: 02:26 EST, 15 July 2015



The end is could be nigh for Adobe Flash.

Leaked documents have revealed the program has a serious vulnerability that lets hackers take over anyone's computer.

And despite various patches and attempts at fixes, Google and Mozilla have now both pulled support for the plugin on their respective Chrome and Firefox browsers.

RIP Flash

Google Chrome Support For Flash Ads Ends Sept. 1

Google's Chrome browser will no longer support Flash-based ads starting Sept. 1. This follows several months of problems with Adobe's Flash platform.

Google's Chrome browser will be blocking <u>Adobe Flash</u> content as of Tuesday, Sept. 1. This comes on the heels of Amazon's announcement that it would no longer support Flash-based ads on its websites.

<u>Chrome has a 27% share of the total browser</u> <u>market</u>, so this is a major hit to Adobe Flash.

This change in Chrome first showed up in <u>a</u> June 4 Google Adwords blog posting about a new setting in the browser that affected Flash



9 Reasons Flash Must Die, And Soon

(Click image for larger view and slideshow.)

content. In the post, Google wrote that it was "designed to increase page-load speed and reduce power consumption by pausing certain plugin content, including many Flash ads."

Google also noted in the post, "As soon as September, this setting will be turned on by default so Chrome users can enjoy faster performance and view more content before charging their batteries."

Panic!

- Luckily, we had been planning for this for the past few months
- But it did mean that we had to ramp up the work to meet the September 1 deadline

The new Ad environment

- We have been working on a new setup that uses:
 - An EVLDNS platform to provide dynamic DNS authoritative server support*
 - An inspired NGINX web server config that can generate and support dynamic URLs over TLS (GGM – take a bow!)
 - Certs on the domain names to allow HTTPS support
 - Linode VM measurement hosts (adding Singapore to the mix)
 - An HTML5 Ad platform
- We started testing this configuration in July
- And switched over our Ad run in August **

* Thanks to Ray Bellis and ISC for their support

** Thanks to Vint Cerf, Warren Kumari and Google for their support

A different View...

From this:



A different View...

To this:



Some Numbers from HTML5 Ad *

1 – 26 October 2015: 224,778,841 samples (avg 8.6M samples per day)

OS	%	Count
Win7	40.87	91,861,206
Android	15.12	33,997,634
iOS	12.55	28,198,792
Win8.1	8.93	20,076,610
WinXP	8.66	19,469,245
WinNT	5.67	12,744,058
Mac OS X	3.65	8,201,719
Win8.0	2.27	5,109,002
Linux	1.00	2,243,873
WinVista	0.65	1,470,365
Windows Phone	0.44	980,570
Chrome OS	0.11	241,238

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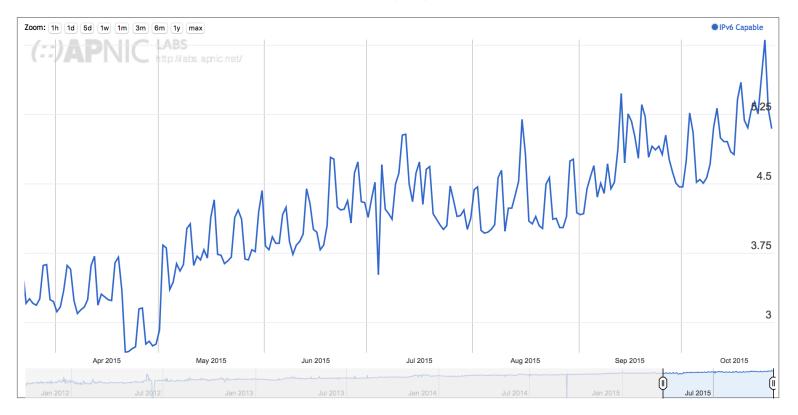
* These are "raw" unweighted numbers

Browser Share *

Browser	%	Count
Chrome	61.44	138,094,601
Safari	17.40	39,117,203
Firefox	11.97	26,915,412
MSIE	4.45	10,000,533
Mobile_Safari	2.47	5,558,215
Opera	2.10	4,726,655
Chromium	0.10	216,915
Silk	0.04	94,382
Netscape	0.00	2,885

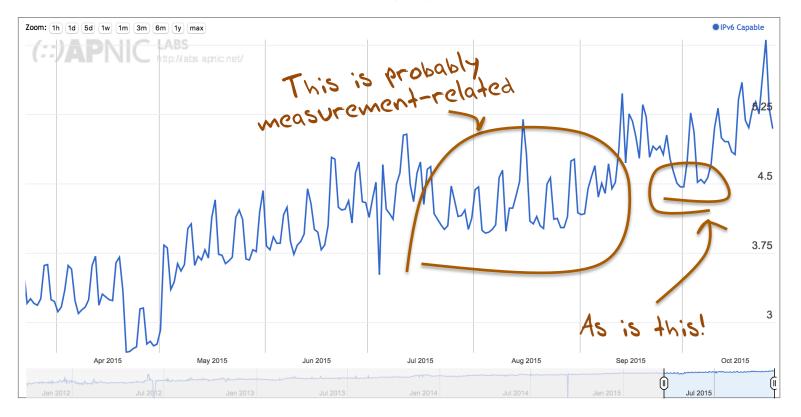
IPv6 Measurement

IPv6 Country Deployment for World (XA)



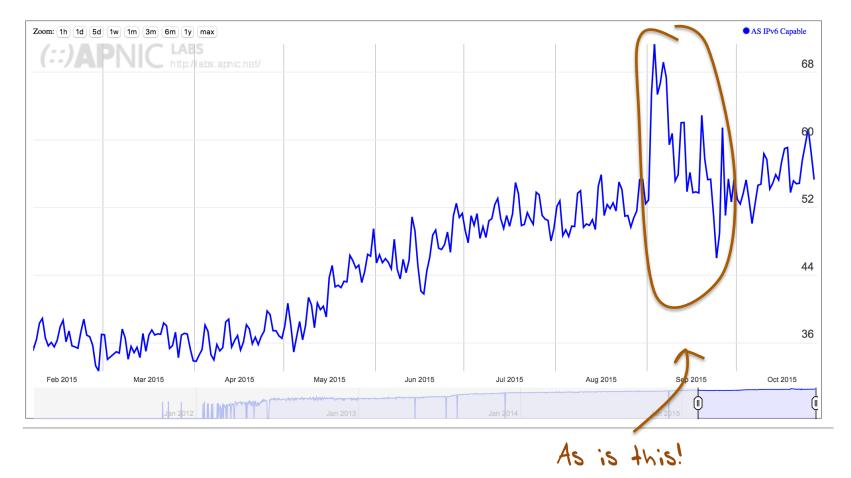
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IPv6 Country Deployment for World (XA)



IPv6 Measurement

IPv6 Country Deployment for AS7922: COMCAST-7922 - Comcast Cable Communications, Inc., United States of America (US)



Where to now

 We already measure IPv6 deployment by country and by network:

http://stats.labs.apnic.net/ipv6

- Over the coming months we want to:
 - Fix up gelocation of networks (the "Liberty Global" case)
 - Break out the numbers to give fixed / mobile by country
 - HTTP / HTTPS breakdowns
 - Browser share over time
 - Measure IPv6 performance and brokenness in a structured manner

That's it!