



World IPv6 Launch

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World IPv6 Day 2011

- A planned 24 hours *test-flight* of IPv6 on the Internet
 - DNS resolution for primary domains (e.g. www.facebook.com; www.google.com; et al) to IPv6 addresses
 - No IPv6 DNS *whitelisting*
 - June 8th, 2011 GMT 00:00-23:59
 - Participation by major Internet companies
 - Content providers
 - Subscriber networks
 - CDNs



World IPv6 Day

Why is it just one day? Why not leave it on?

- Facing *IPv6 Brokenness*:
 - Broken homes (so sad)...
 - Client applications are now often designed to have an affinity for IPv6 (thanks developers!) But what about:
 - Problem applications (non-conformance to critical RFCs like RFC3484)
 - User resolvers retrieving AAAA records while actually having no (or shabby) IPv6 connectivity
 - Home gateways configuring 6to4 connections leading to suboptimal routing
 - Rogue RAs on the LAN



World IPv6 Day (cont.)

Why is it just one day? Why not leave it on?

- More *IPv6 Brokenness*:
 - Broken networks
 - LSN: Large Scale NAT (the specter formerly known as CGN or Carrier Grade NAT)
 - Geo-location
 - TCP port exhaustion
 - The challenge of measuring IPv6 brokenness in the CDN
 - Who owns and manages the end-to-end transaction?
 - The potential CDN value proposition of detecting brokenness



World IPv6 Launch

- Kick off on 6th June 2012
- No turning back, it goes on for real
- Everyone participates – Edge ISPs, backbone providers, Content Providers, everyone..
- Why is this important
 - APNIC already has run out of address space, after IANA allocated it's last blocks
 - Likely that other regions will also run out this year or next year
 - Without IPv6, there is no growth.



Who is participating?

- Networks
 - Access to End users
- Content Creators / Delivery Networks
 - Content fully accessible on IPv6
- Vendors
 - Feature parity with IPv4, ease of deployment
- Checkout the latest list at www.wordlipv6launch.com



What are the drivers

- Lack of v4 Addresses.
- Need to stop distinguishing between v4 and v6 deployments
- Make IPv6 mainstream
 - The technical community knows about it, but a major event of this magnitude will make the business side realize the importance.



What about AP Region

- AP region is already under the pressure of the lack of v4 addresses.
- The growing usage of Internet and expansion of networks by operators both demand better and stable connectivity.
- The tremendous growth in Internet Access through mobile phones keeps the pressure on Operators



What needs to be done

- World IPv6 Day was an experiment, that worked
 - Nothing broke
- This effort is similar approach, so that networks can setup a timeline and remove all the hiccups they had the previous year
 - And leave it on for later



What should we do

- Go to the <http://www.worldipv6launch.com> and register yourself
- Look into your networks and make a plan for deployment
- Talk to people who have done it before, here at APRICOT or on various support forums like APOPS, SANOG,
- Utilize APNIC provided resources.



Thank you.