From World IPv6 Day to World IPv6 Launch: This time it's for real

www.WorldIPv6Launch.org

World IPv6 Launch 2012

- This time it's for real: 6 June 2012 is the kick-off date
- Regular business operation with IPv6
- "On by default"
- Commercial IPv6 at scale by year-end.

IPv6 is a "Must Have" Technology

Connectivity

- No, you cannot have more IPv4 addresses
- Even if you could, connecting the next 4 billion requires something more than IPv4 can ever do

Innovation

- Additional infrastructure inhibits innovation through operational and technological constraints
- IPv6 enables an open, fully connected Internet
- Permission-free innovation is a key part of what makes the Internet the network that it is – where will the next Google or Facebook come from?

Where are we coming from?

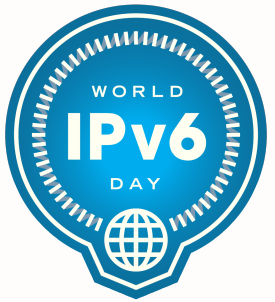
What was World IPv6 Day? www.worldipv6day.org

For 24 hours on 8 June 2011 (00h00-23h59 UTC) Facebook, Google, Yahoo! and more than 1000 other websites turned on IPv6 access on their "front door"

Goals:

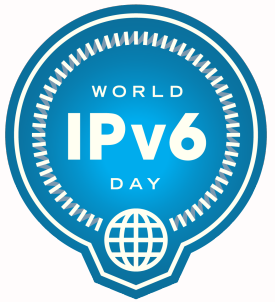
- **Motivate Internet service providers, hardware makers, operating system vendors, Web companies and others to prepare their services for IPv6**
- **Understand what issues still need to be addressed to ensure a successful transition to IPv6 as IPv4 addresses run out.**

While there have been similar notable efforts, World IPv6 Day was the first global, real-world "test-flight" of IPv6—and the largest ever.



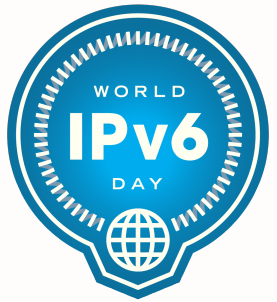
Motivations for the World IPv6 Day Event – and Impacts

- Breaking the chicken-and-egg problem of IPv6 deployment – networks clearly see that content is getting there
- Improving IPv6 connectivity by understanding outstanding issues faced by a small percentage of users (but significant numbers for large content providers) – more fixes are in flight
- Providing a target date for already planned IPv6 rollouts – people definitely responded to having a date
- Spurring organizations to create a plan for rolling out IPv6 – being like Google, Facebook, and Yahoo! is important
- Catalyzing the kind of collaboration that the Internet has relied upon through its history – people noticed that the Internet industry came together to advance something that is important for the overall long term health of the Internet



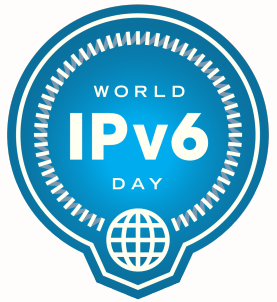
What happened?

- **Nothing! (this was terrific)**
- **Provided a basis for the world to think about IPv6, this can be done, won't break.**
- **Traffic numbers were low globally (< 1%), but in France >3% of traffic was IPv6, due to one IPv6 enabled network (Free)**
  - this demonstrates that if you enable your network with IPv6, it will get used with IPv6
  - this will be true wherever IPv6 is turned up.
- **Only isolated issues reported**



World IPv6 Day Impacts

- **Have heard other industries say: "Well, that clearly worked."**
- **It was collaborative effort, across business boundaries**
- **What this means for the operator community: content providers are ready; if you provide access over IPv6, increasingly you will have traffic**
- **World IPv6 Day blew the doors off some preconceptions:**
  - that IPv6 isn't doable, and won't be done
  - that industry players can't coordinate
  - we've seen and heard repeated evidence of "changed minds" because of the event



Where are we going?

World IPv6 Launch

www.worldipv6launch.org

When?

- **6 June 2012**

What?

- **IPv6 is part of Regular Business, on by default, no special configuration necessary for anyone anywhere**

Who?

- **Access networks, home router vendors, websites from around the world participating, please join – www.worldipv6launch.org**

Why?

- **Acceleration: those already planning to roll-out IPv6 should accelerate their plans**
- **Adoption: those who don't have plans yet, it's safe now, please start**
- **Definition: industry leaders are establishing IPv6 as the new normal**

World IPv6 Launch: Access Networks

Who?

- **ATT, Comcast, Free, Internode, KDDI, Time Warner Cable, XS4ALL**
- **Additional networks are welcome to join, see: www.worldipv6launch.org**

IPv6 becomes part of Regular Business now

- **New subscribers get IPv6 on by default after 6 June 2012**
- **No user config required**
- **IPv6 usage will depend on home networks, home equipment, etc.**
- **But 1% of visits to big websites from participating networks needs to be done using IPv6 by 6 June**
- **This will be measured by the big participating websites and displayed on the World IPv6 Launch website**

World IPv6 Launch: Home Router Vendors

Who?

- Cisco, D-Link
- Additional home router vendors are welcome to join, see: www.worldipv6launch.org

IPv6 becomes part of Regular Business now

- Majority of products shipping with IPv6 on by default
- No user configuration is required to use IPv6
- V6 interoperability verification by UNH-IOL (and others?)

World IPv6 Launch: Websites

Who?

- Facebook, Google, Microsoft Bing, and Yahoo!
- Others are welcomed to join, see: www.worldipv6launch.org

IPv6 becomes part of Regular Business now

- IPv6 is enabled on the main website
- No IPv6 specific URLs (www.ipv6.example.com) or mirror sites
- IPv6 enabled users will use IPv6 without doing anything
- The World IPv6 Launch website will have a reachability dashboard similar to what was used in 2011 for World IPv6 Day

Joining World IPv6 Launch is a Commitment to Commercial-grade IPv6

- Industry leaders are committed
- Aims to encourage additional commitment
- Builds on and makes a significant step up from World IPv6 Day in 2011

World IPv6 Launch is One Part of the Internet Society's Ongoing Efforts to Promote IPv6

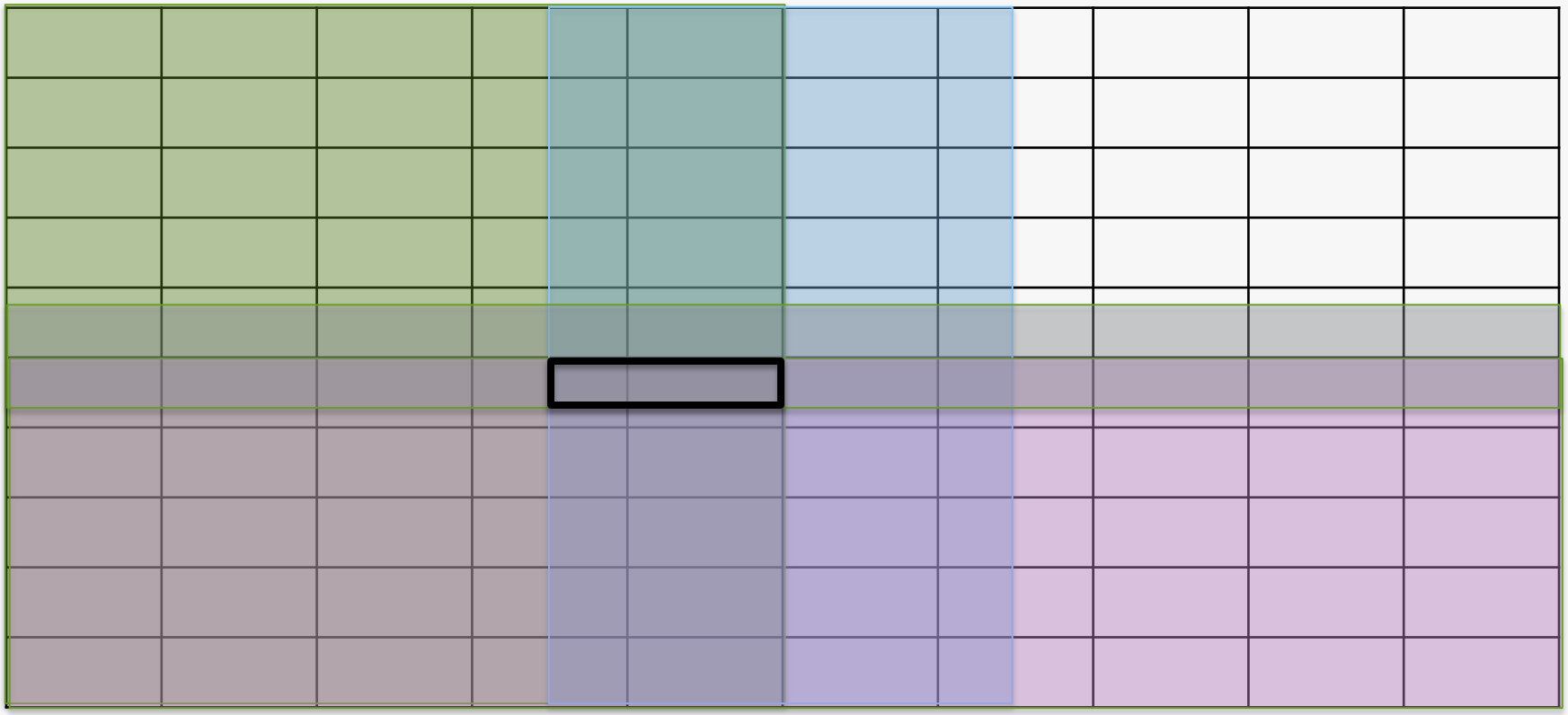
- World IPv6 Day in 2011
- The Deploy360 (http://www.internetsociety.org/deploy360/) programme provides practical support for organizations attempting to deploy IPv6
- Continue to support IPv6 deployment in various policy venues around the world

THIS TIME IT IS FOR REAL
6 JUNE 2012

www.worldipv6launch.org

The Internet Society

How do we get to 1% actively using IPv6?



50% of CMs

30% of CMTSs

50% of OS support IPv6

15% have no gateway

Each block represents 100,000 users.

1% = 100,000

Commitments Needed

- Deploy IPv6 on 35% of CMTSs
  - 7.4.2.5
  - SCE4
- Finish regional network and data center work
- Upgrade 50% of CMs to support IPv6 CPE traffic