

# Wikimedia & IPv6

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# IPv4

- Running out in the next few months!
- **We** may have IPv4 addresses, but not all our users will
- Wikimedia is also short on IPv4

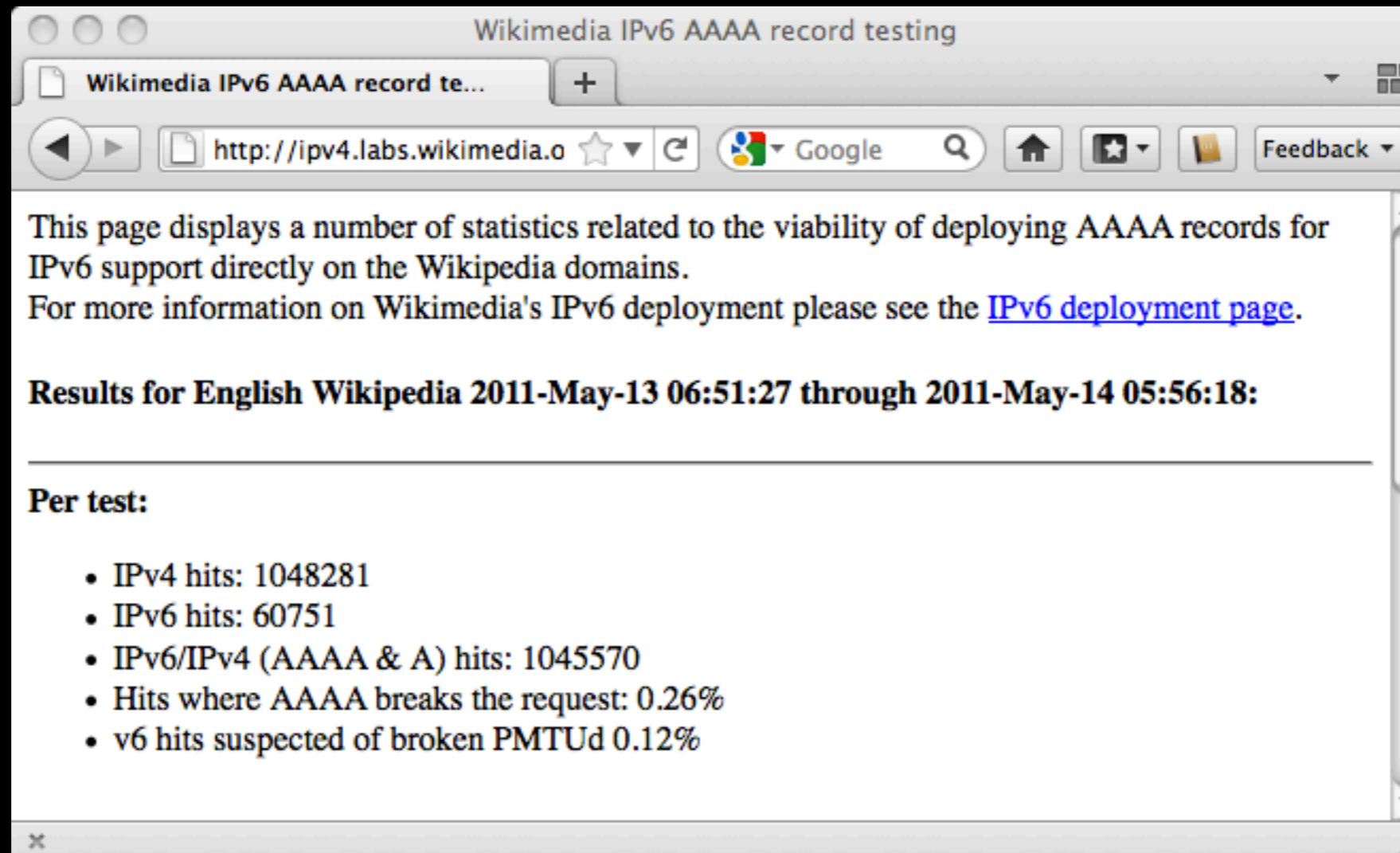
# IPv6

- Mostly the same
- Just really long addresses (128 bits)
- Hexadecimal notation
  - `2620:0:861:102::ff03:ce9`
- Incompatible with IPv4

# Problems

- Not many users have IPv6 connectivity yet
  - Like... the hackathon
- Or worse... **broken** connectivity
- If we just enable it, 0.30% of users will be unable to reach Wikipedia!

# IPv6 brokenness testing



Wikimedia IPv6 AAAA record testing

Wikimedia IPv6 AAAA record te...

http://ipv4.labs.wikimedia.o

This page displays a number of statistics related to the viability of deploying AAAA records for IPv6 support directly on the Wikipedia domains.  
For more information on Wikimedia's IPv6 deployment please see the [IPv6 deployment page](#).

**Results for English Wikipedia 2011-May-13 06:51:27 through 2011-May-14 05:56:18:**

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**Per test:**

- IPv4 hits: 1048281
- IPv6 hits: 60751
- IPv6/IPv4 (AAAA & A) hits: 1045570
- Hits where AAAA breaks the request: 0.26%
- v6 hits suspected of broken PMTUd 0.12%

# Community & IPv6

- Our community works with IP addresses!
- Anonymous user identities, banning/blocking, etc.
- Documentation and user support

# IPv6 at Wikimedia

- Briefly enabled on Wikipedia in 2005
- Since 2008:
  - Native IPv6 on Wikimedia network
  - Enabled for some misc. services
  - Enabled for some networks on “upload”
  - Javascript testing on [en.wikipedia.org](http://en.wikipedia.org)

# June 8: World IPv6 Day

- Many popular web sites will enable IPv6 for 24 hours
- Google, Facebook, Yahoo!, Akamai, Limelight, many others
- Maybe, hopefully, Wikimedia



# To do

- Infrastructure
- MediaWiki (mostly done)
- User documentation, communication, support