



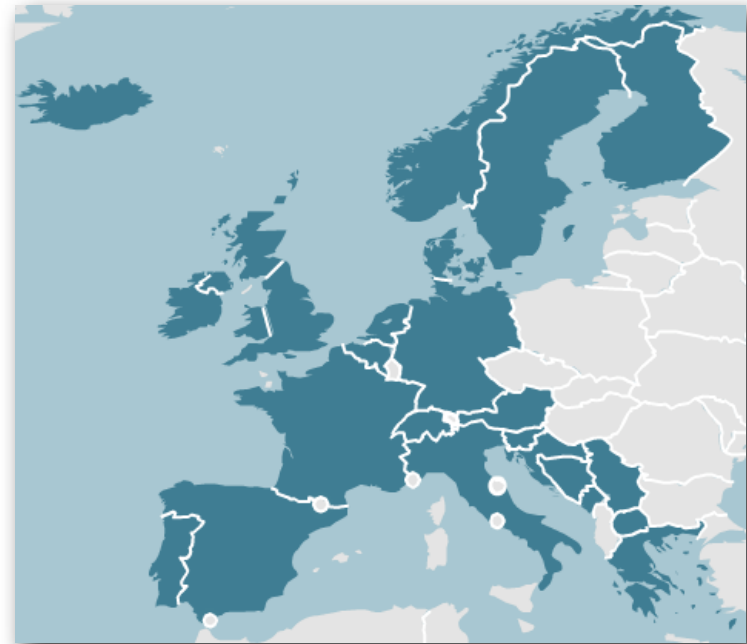
Hostcount Update

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History

- First published in 1990
 - 19 countries: AT BE CH DE DK ES FI FR GR IE IL IS IT NL NO PT SE UK YU
 - Total hosts: **31,724**
 - Second level domains: 258
- November 1992 hosts: **271,795**
- Report run monthly with stats presented at:
<http://www.ripe.net/hostcount>
- Total unique hosts September 2008: **25M**





Original mission statement:

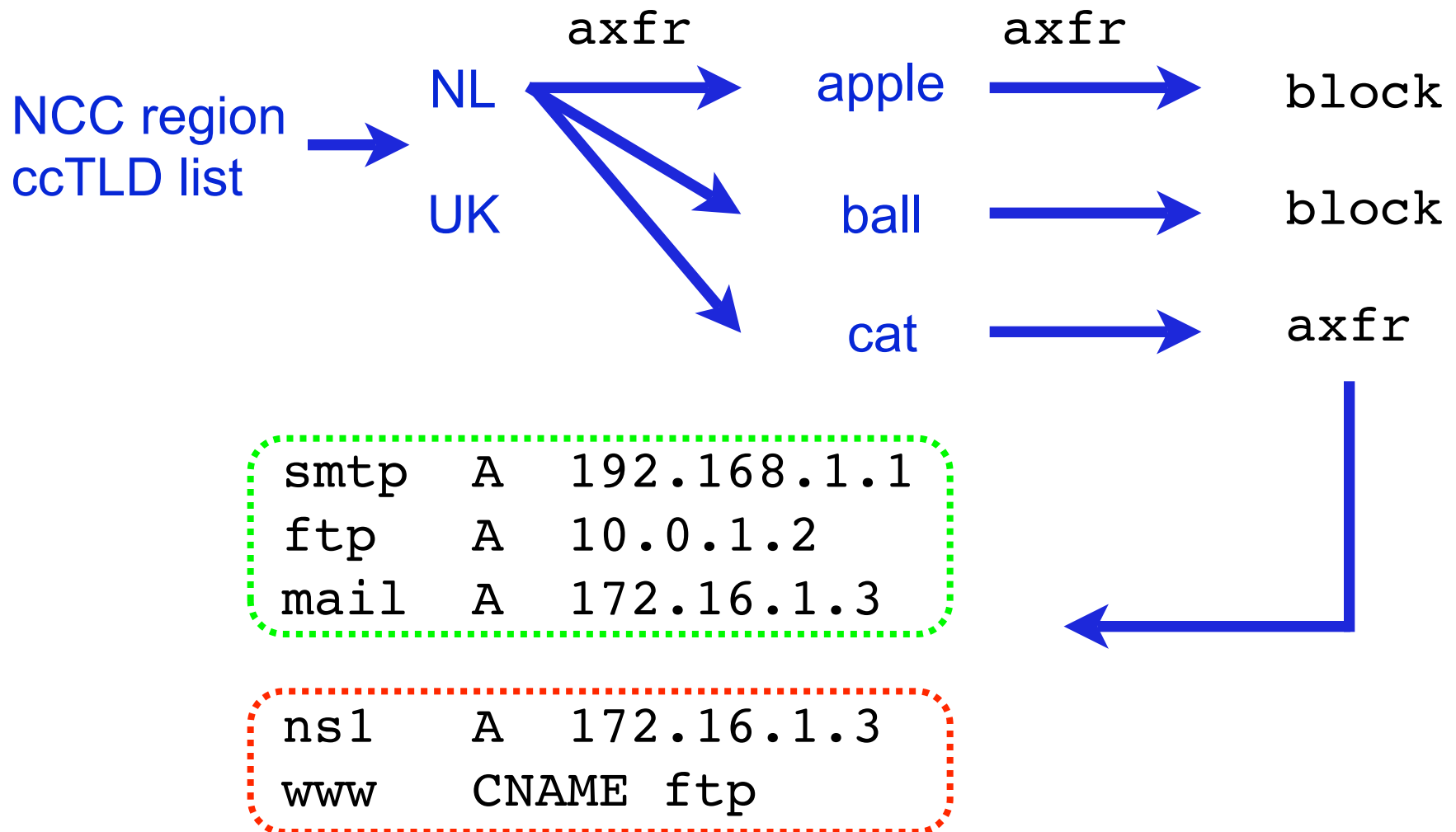
- Enumerate the number of hosts in the RIPE NCC service region
- Estimate the size and growth of the internet
- Reflect the distribution of hosts on a per country basis



Methodology

- Used DNS query tool 'host'
- Recursive AXFR applied to each ccTLD
- Counts unique A records from collected zones

Methodology





Problems

- Software old and prone to failure
- More and more domains to query
 - scalability issues
- Zone cache skews results
- AXFR increasingly blocked
- No IPv6 support
- Poor presentation

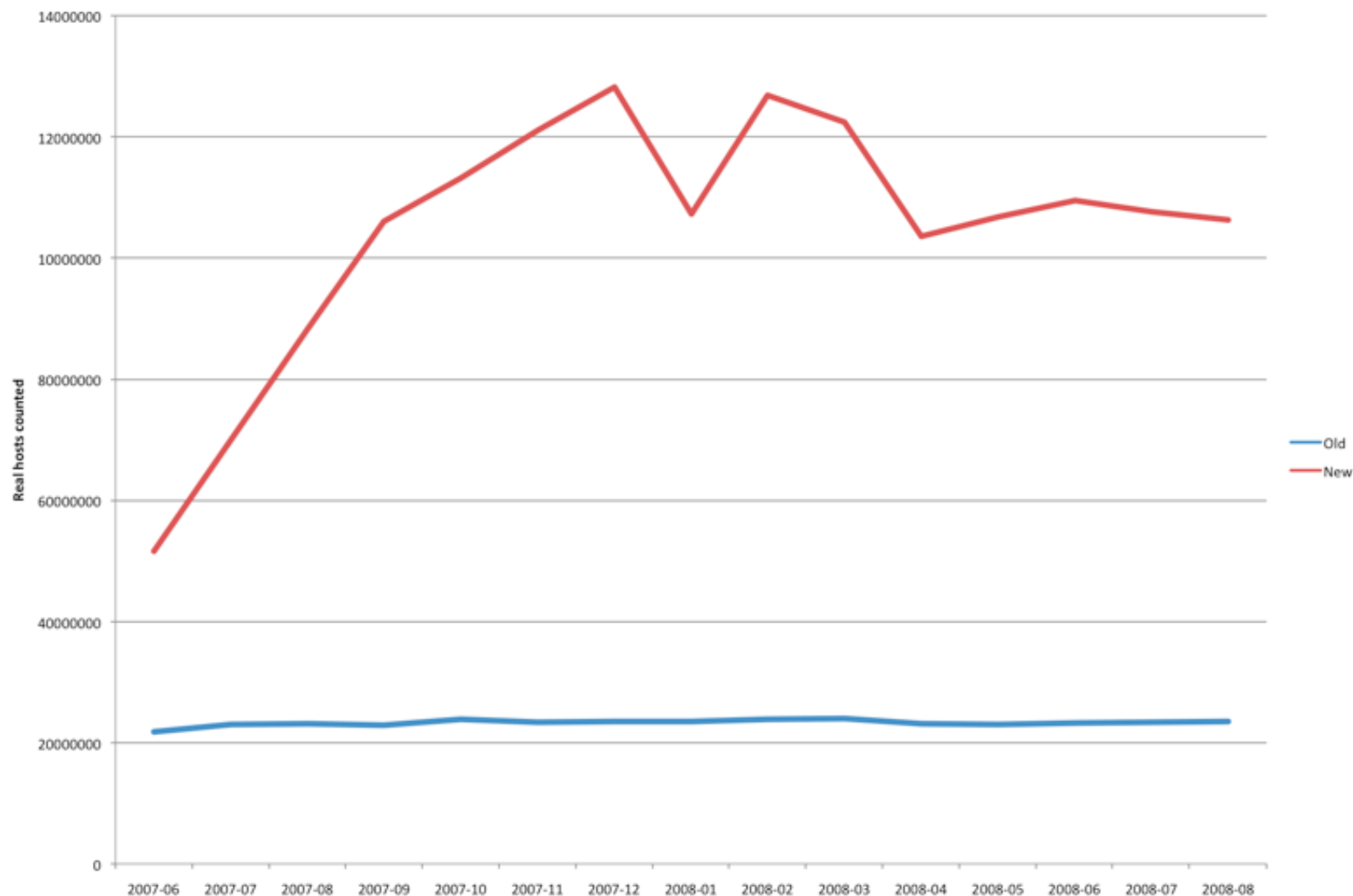


Hostcount++

- Complete re-write of legacy software
 - uses dnsjava library, ActiveMQ, and HSQLDB
- More data sources for increased accuracy
 - Forward DNS
 - Reverse DNS (ip6.arpa and in-addr.arpa)
 - BGP data for visibility (Using RIPE NCC RIS)
- DIY kit for ccTLD operators
 - Addresses scalability and privacy concerns
 - .UK and .IE participating
- Dual running phase for data continuity
 - Between June 2007 to September 2008

Comparison

HC and HC++ comparison

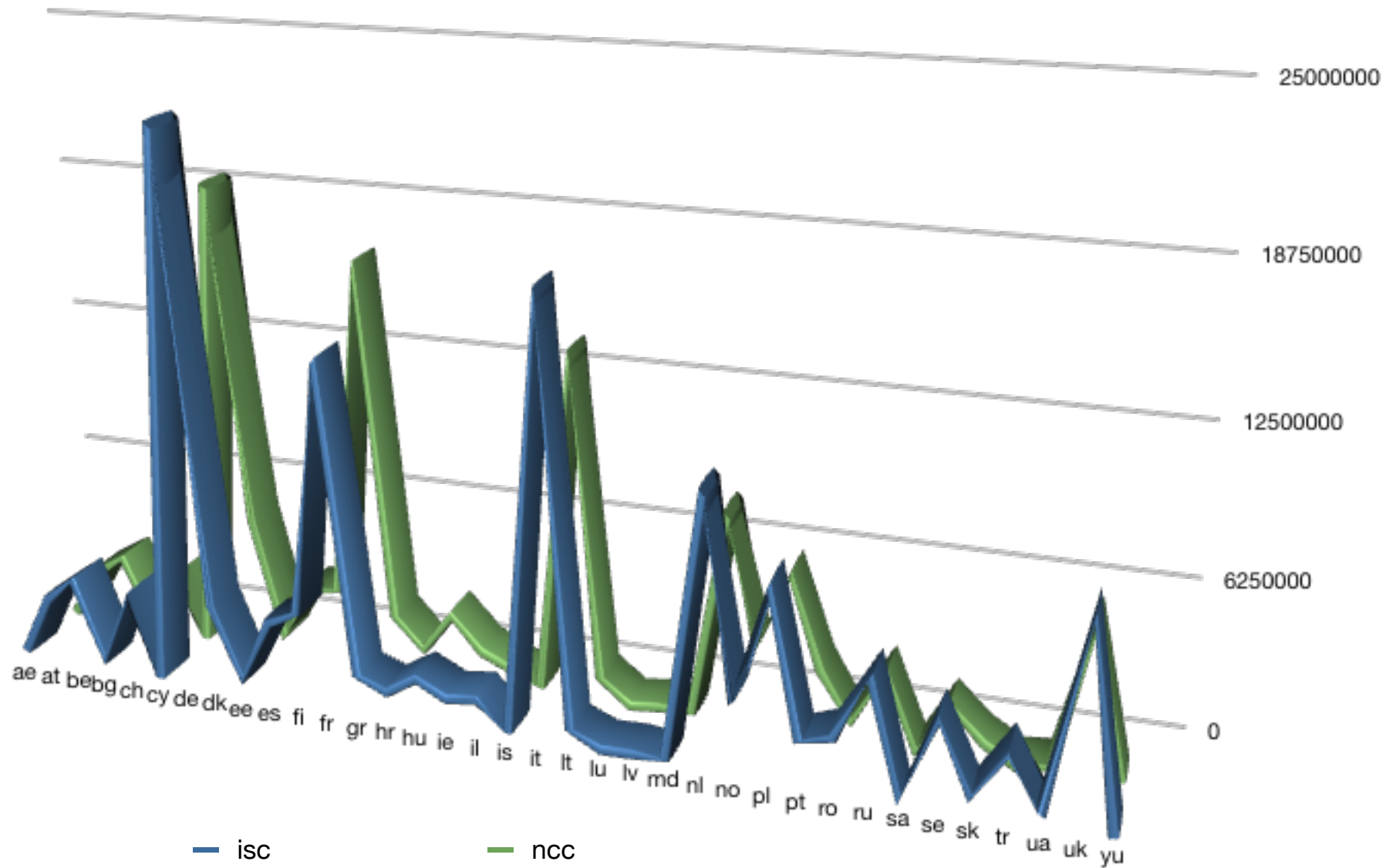




New data

- ~15,000 unique IPv6 hosts
 - 100% visible in BGP
- ~107M unique IPv4 hosts
 - 99.87% visible in BGP (~250k not routed)
- Compare to ISC Internet Domain Survey
 - <http://www.isc.org/ops/ds/>
 - July 2008: ISC 133M / NCC 120M [for NCC region]

ISC/NCC comparison





New beta website

View for **September 2008** for **RIPE Region (all)**. ▶ FWD ◀ REV

Summary

Overview

Details

Main metrics.

- Hosts: 107,141,905
- Growth speed: 0.87%
- People per hosts:
- Web sites: 2,466,420



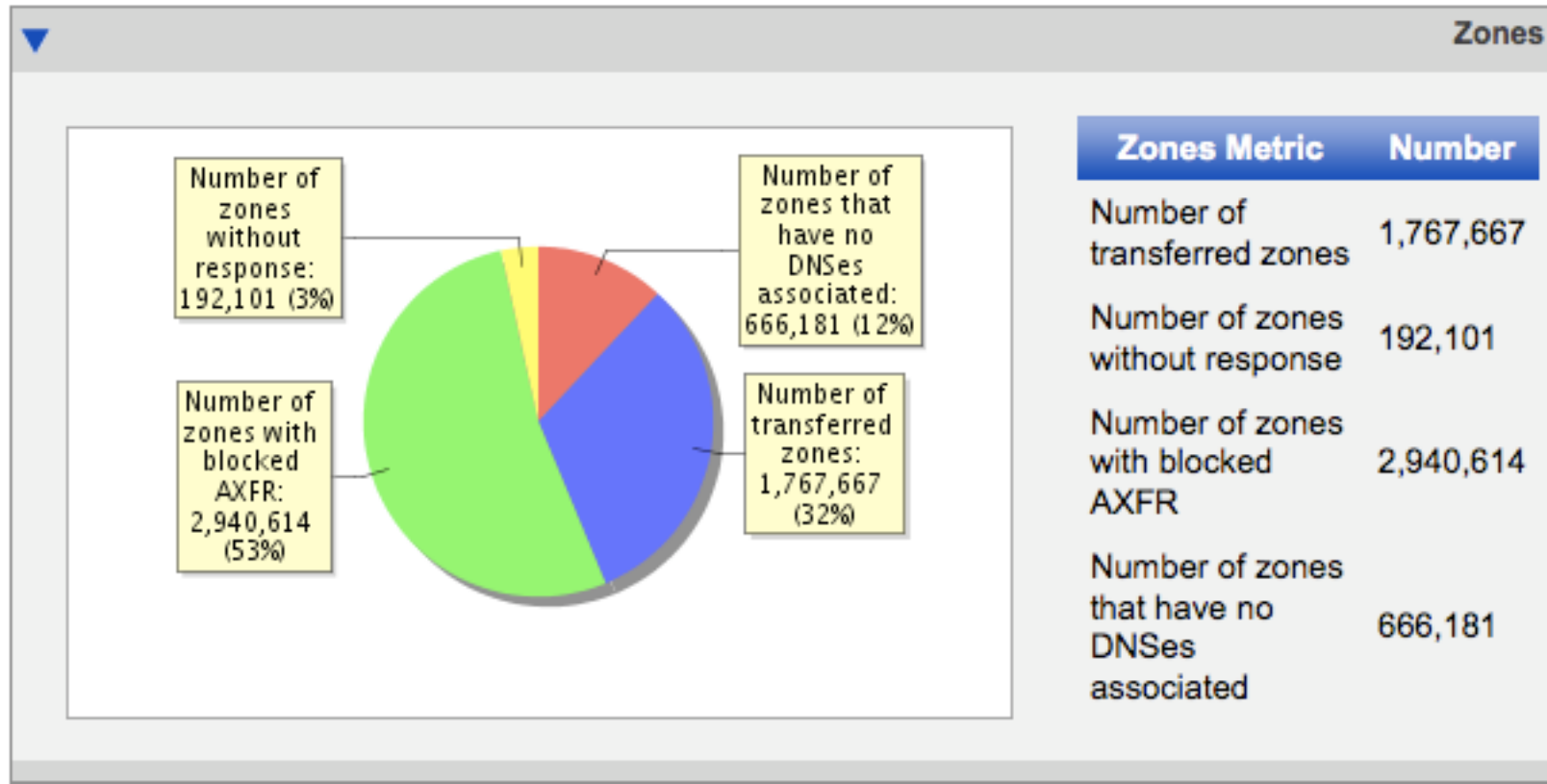
Zones:

All RIPE Region

ad ae al am at ax az ba **be** bg bh bj by ca ch ci cm cv cy cz **de** dj dk dz ee eg
 es eu fi fo **fr** ga gb ge gg gh gi gl gm gn gq gr gw hr hu ie il im iq ir is **it** je jo ke kg
 kw kz lb li lr lt lu lv ma mc md mk mt ng **nl** no om **pl** ps pt qa ro ru sa se si sj sk
 sm su sy td tj tm tn tr ua ug **uk** uz va ye yu

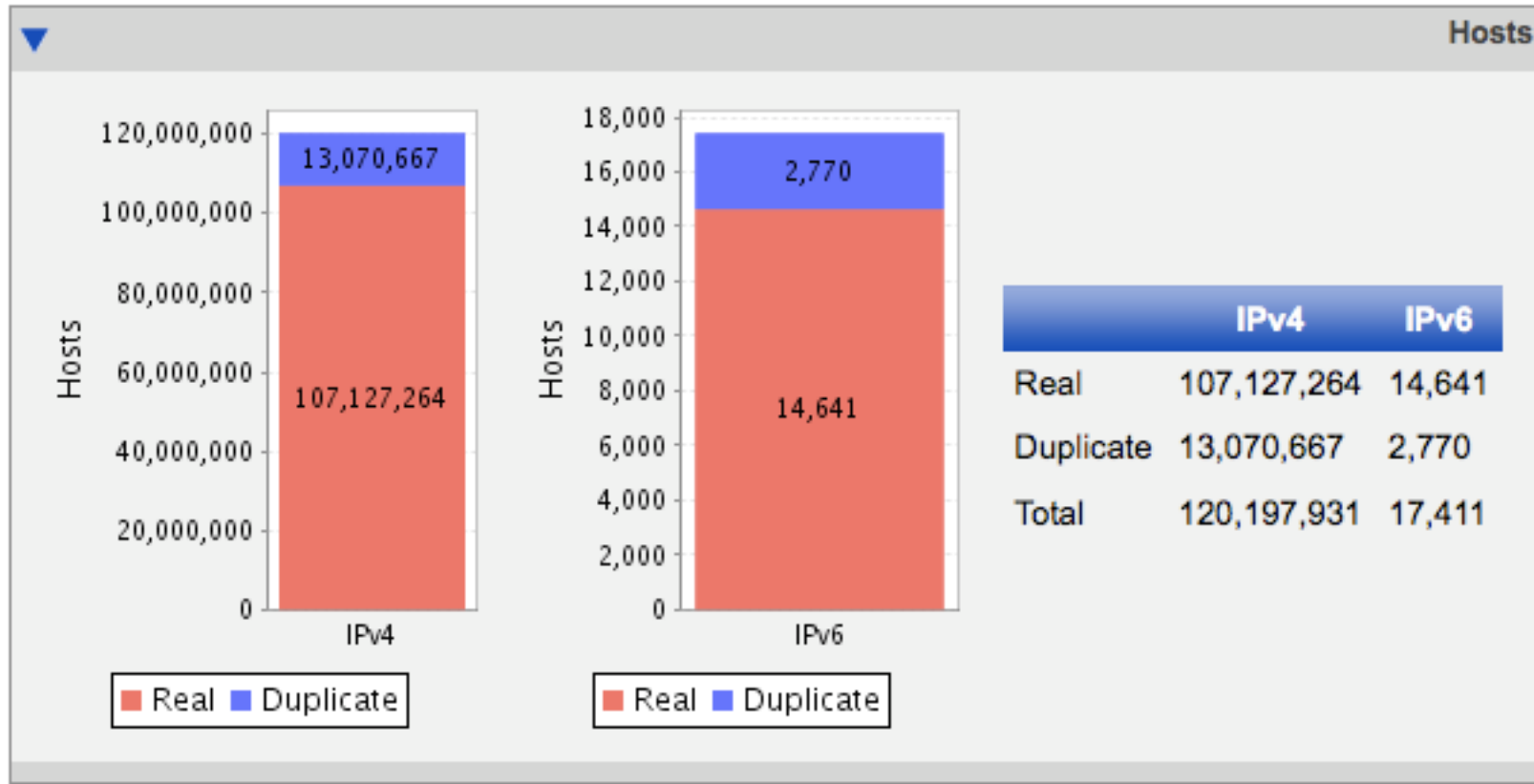
<http://www.ripe.net/is/hostcount>

New beta website



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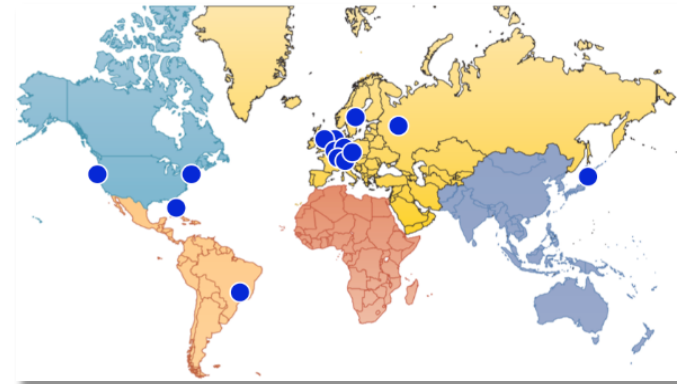
New beta website



<http://www.ripe.net/is/hostcount>

Information Services

- At RIPE57
 - New MyASN at the Routing-WG, Wednesday 13:30
 - TTM developments at the TT-WG, Thursday 11:00
- Routing Information Service (RIS)
 - <http://www.ripe.net/ris>
- Test Traffic Measurements (TTM)
 - <http://www.ripe.net/ttm>
- DNSMON
 - <http://dnsmon.ripe.net>
- IS Demonstration Stand
 - In the hallway, by registration desk



Questions?

