



RIPE Labs

<http://labs.ripe.net>

Operator Tools, Ideas and Analysis

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RIPE NCC




What is RIPE Labs?



- It is a web site, but more importantly
 - A platform and a tool *for the community*
- You can
 - Preview new tools and prototypes
 - Expose your ideas and research
 - Contribute your views in forums and blogs

<http://labs.ripe.net/>





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RIPE Labs

Innovative Internet tools & ideas

- ✓ Share experience
- ✓ Showcase tools
- ✓ Present research



New contributions

RSS
tagcloud

0

comments

ExaBGP - A new Tool to Interact with BGP

Thomas Mangin — 08 July 2010 10:10

ExaBGP is a new application designed to provide an easy way for programmers and system administrators to interact with BGP networks.

Tags: tools, routing

0

comments

Economic Incentives for Cooperation to Fight Spam

John S. Quarterman — 06 July 2010 09:30

Users of gmail or Yahoo mail may not notice because those services filter pretty effectively, but around 90% of all email is spam, and the situation is not getting better.

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Thomas Mangin published a new open source tool to interact with #BGP on RIPE Labs: <http://bit.ly/aMtsT7> #RIPELabs

08 July 2010 11:22

A team at the university of Texas is advocating more cooperation in fighting spam. Read more on RIPE Labs: <http://bit.ly/bVfrFG>

06 July 2010 11:38

Part 2 of IPv6 Measurement compilation published on RIPE Labs: <http://labs.ripe.net/content/ipv6-measurements-compilation-part-2>

22 June 2010 15:30

tagcloud

api apnic arin dns dnssec database netsense pi rex ripe 59 ripe 60 ripe db ripe meeting ripe ncc ripe allocation experts ipv4 ipv6 ipv6 adoption



Website Improvements



- Improved navigation and search!
 - Tag cloud
 - “Live” search
 - Project pages
- Easy participation!
 - Comment without registering
 - Register to contribute articles



Currently on RIPE Labs



tagcloud

api apnic
arin dns
dnssec
database
netsense pi rex
ripe 59 ripe 60 ripe
db ripe meeting
ripe ncc ris rpsl
allocation
datarepository
ipv4 ipv6 ipv6
adoption
measurements
policy root-
servers
routing
statistics
tools

- DNS Monitoring (DNSMON)
- IPv4 and IPv6 Measurements
- DNS and DNSSEC Related Data and Tools
- RIPE Database API and Abuse Finder Tool
- BGP Tool
- BGP Route Origin Validation
- Various Stats and Measurements
- and much more ...

IPv6 Related Content



- IPv6 in browsers and resolvers
 - v4/v6 capability/preference
 - More resolvers (4.9%) than clients (1.2%) have native v6
- IPv6 uptake/penetration analysis compilation
 - Aggregated global publications
 - APNIC, Hurricane Electric, Google, et al.
 - Comment if we missed something!
- IPv6 CPE support survey
 - By Marco at XS4ALL
 - Updated regularly

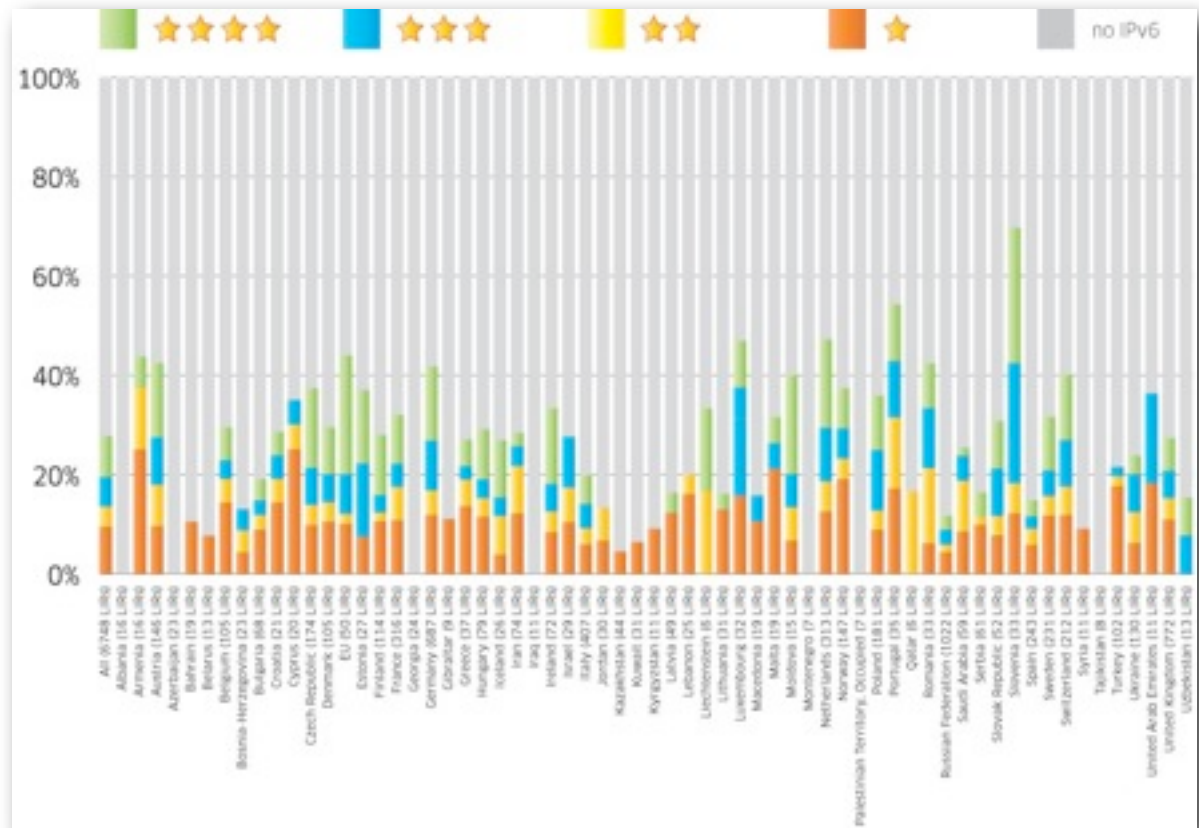
	labs	www
number of measurements	768	8176
web client IPv6 preference	7.2%	1.4%
web client IPv6 capability	9.2%	3.5%
resolver IPv6 capability	11.0%	5.0%

	AVM (FRITZ!Box)	Dreaytek	Zyxel	Juniper (ScreenOS)	Juniper (JUNOS)	Cisco
Hardware version required	7970, 7970	Vigor 2130 series, vigor 120	All models released in 2010	All	All	Most 8010 boxes
Minimum software level required	"Labor" only	2.130/v1.3.0 120/v3.2.4.3	Per model, check vendor	6.1	10.2	10.4T or 15
Status	Beta	General deployment	Beta	General deployment	Early deployment	General deployment
WAN Layer 2						
Docsis 3.0	vendor	no	no	no	no	-
ADSL 2+	confirmed	not only	vendor	confirmed	confirmed	confirmed
VDSL	confirmed	no	vendor	no	vendor	-
Ethernet	confirmed	vendor	vendor	confirmed	confirmed	confirmed
FTTx	-	vendor	vendor	no	no	-
WAN Layer 3						
PPPoA	confirmed	no	vendor	no	vendor	confirmed
PPPoE	confirmed	confirmed	vendor	confirmed	confirmed	confirmed
RFC2487/bridge	vendor	no	vendor	no	no	-
RFC2487/routed	-	-	vendor	vendor	vendor	-
Plain IP	-	vendor	vendor	confirmed	confirmed	confirmed
WAN address acquiring (unnumbered)						
PPP link local only	confirmed	confirmed	vendor	confirmed	confirmed	confirmed

IPv6 Ripeness



- Rating system for ISPs based on:
 - IPv6 Allocation
 - route6 object
 - BGP visibility
 - rDNS





DNS Related Content



- DNSSEC in the root zone
 - K-root perspective
 - Priming queries, large TCP queries
- DNS reply-size tester
 - Tool to determine resolver capabilities
 - 685k measurements, 45k source
- DNSMON development
 - New interface in beta



RIPE Database – New Tools



- Whois data via RESTful Web
- RIPE Database queries including search
- Abuse Finder – A tool to find all abuse related contact information

This application uses the [RIPE Database REST API](#).

The RIPE Database is subject to Terms and Conditions. See <http://www.ripe.net/db/support/db-terms-conditions.pdf>

RIPE Database

Search (returns max 100 objects per query)

Query string, you can specify up to five comma separated keys:

Sources	Types	Flags	Inverse lookup
<input type="checkbox"/> abuse-mailbox	<input checked="" type="checkbox"/> admin-c	<input type="checkbox"/> auth	<input type="checkbox"/> author
<input type="checkbox"/> irt-nfy	<input type="checkbox"/> local-as	<input type="checkbox"/> mbrs-by-ref	<input type="checkbox"/> member-of
<input type="checkbox"/> mnt-irt	<input type="checkbox"/> mnt-lower	<input type="checkbox"/> mnt-nfy	<input type="checkbox"/> mnt-ref
<input type="checkbox"/> nserver	<input type="checkbox"/> org	<input type="checkbox"/> origin	<input type="checkbox"/> person
<input type="checkbox"/> rev_srv	<input type="checkbox"/> sub-dom	<input checked="" type="checkbox"/> tech-c	<input type="checkbox"/> upd-to
			<input type="checkbox"/> zone-c
			<input type="checkbox"/> fingerpr
			<input type="checkbox"/> form
			<input type="checkbox"/> mnt-by
			<input type="checkbox"/> mnt-domains
			<input type="checkbox"/> mnt-routes
			<input type="checkbox"/> notify
			<input type="checkbox"/> ref-nfy
			<input type="checkbox"/> referral-by



BGP, Routing, Other



- ExaBGP (Thomas Mangin, Exa Networks)
 - A new tool to interact with BGP
- BGP Route Origin Validation
 - Effects of BGP route origin validation on mis-announcements and hijackings
- World Cup Traffic Effects (Serge, EURO-IX)
 - Analysis of traffic from IXPs
- RIPE NCC Data Repository
 - Centralised access to datasets
- Dark Space Measurements
 - Traffic observed hitting former bogon space



Why RIPE Labs?



- Faster, tighter innovation cycle
 - Provide useful prototypes to you earlier
 - Rapidly react to events of interest
 - Direct from the individuals involved
- Tighter community interaction
 - Transparency
 - Collaboration
 - More effective feedback loop



Questions or Suggestions



- That was just a taster!
- Why not take a look and **participate?**
- Questions or comments?
 - labs@ripe.net

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