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# **RIPE Labs** Operators Tools and Data

MENOG 7, Istanbul, Turkey, 23 October 2010

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- It is a web site, but more importantly:
  - It is a platform and a tool for the community
- You can:
  - Test and evaluate new tools and prototypes
  - Contribute new ideas and research results
  - Provide feedback and discuss with others

http://labs.ripe.net/



# Currently on RIPE Labs

#### tagcloud

api apnic arin asns cpe dns dnssec database netsense pi rex ripe 60 ripe db ripe meeting ripe **NCC** ris rpsl allocation atlas certification datarepository ipv4 ipv6 ipv6 adoption measurements policy root-servers

routing statistics tools

- IPv4 and IPv4 measurements
- DNS and DNSSEC related tools
- RIPE Database API and tools
- Statistics and Measurements
- and much more...

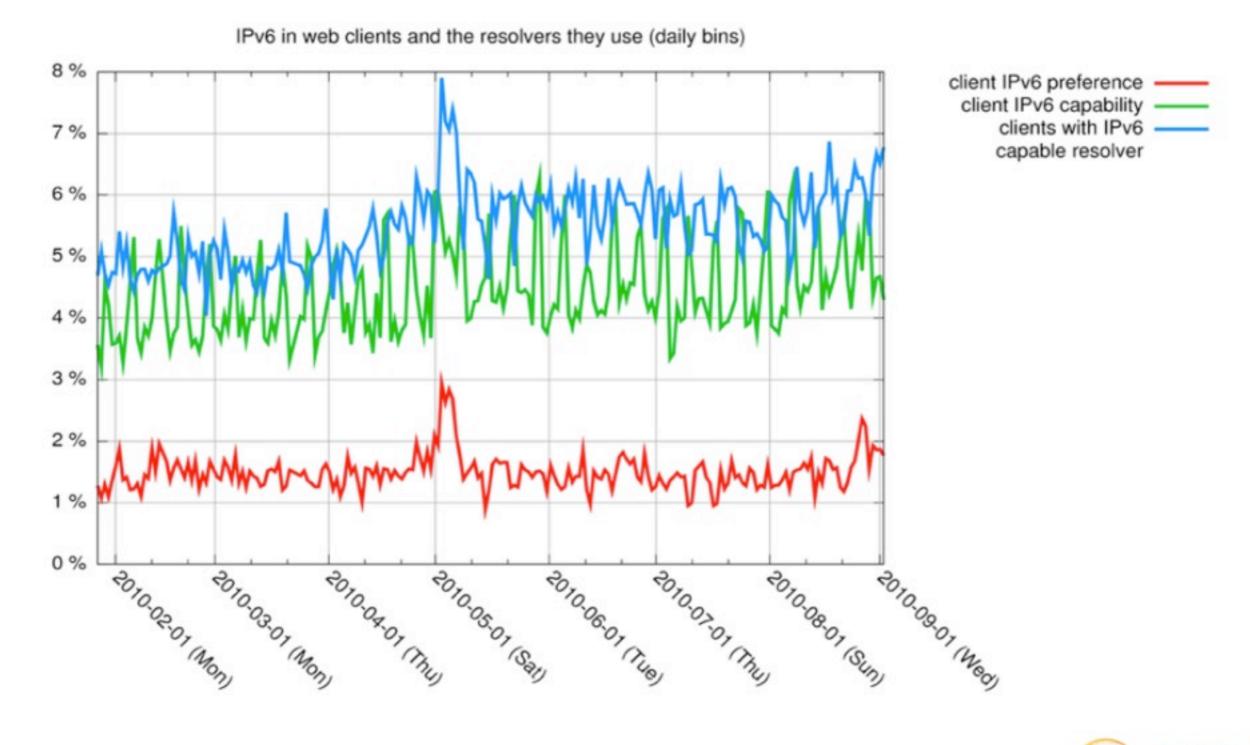


### IPv6 at Web Clients and Resolvers

- When people connect to servers, we measure
  - IPv4 capability
  - IPv6 capability
  - IPv4/IPv6 preference
- More resolvers (4.9%) than clients (1.2%) have native IPv6 connectivity
  - Expect to see increase of clients over time
  - We will continue measurements



# Accessing www.ripe.net





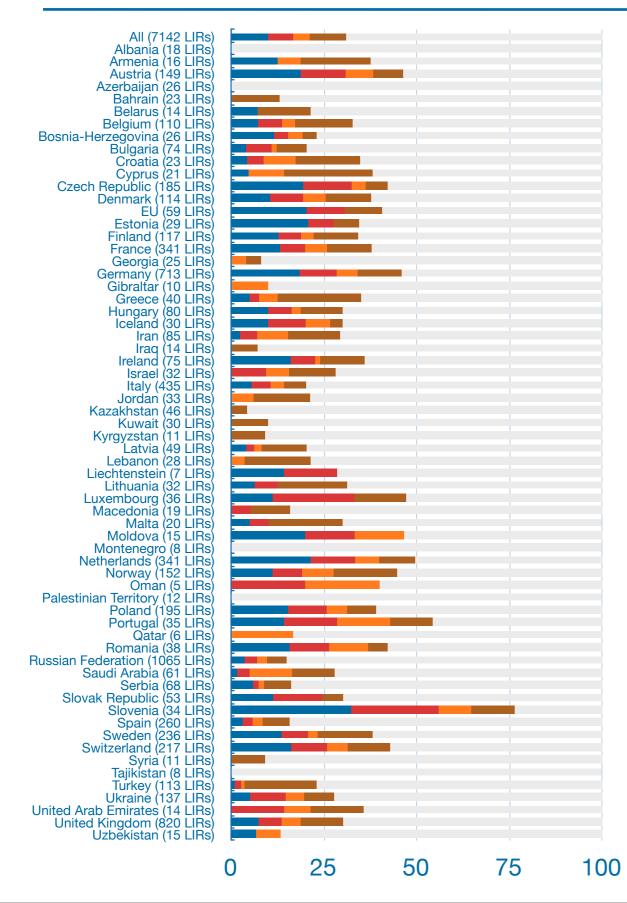
# IPv6 Customer Premise Equipment Survey

- Survey among CPE vendors
- Results will be updated regularly on RIPE Labs

	AVM (FRITZ!Box)	Draytek	Zyxel	Juniper (ScreenOS)	Juniper (JUNOS)	Cisco	D-Link
Hardware version required	7270, 7570	Vigor 2130 series, vigor 120	All models released in 2010	All	All	Most SOHO boxes	Most new boxes
Minimum software level required	"Labor" only	2130:v1.3.0 120:v3.2.4.3	Per model, check vendor	6.1	10.2	12.4T or 15	see notes
Status	Beta	General deployment	Beta	General deployment	Early deployment	General deployment	General deployment
WAN layer 2							
Docsis 3.0	vendor	no	no	no	no		-
ADSL 2+	confirmed	120 only	vendor	confirmed	confirmed	confirmed	no
VDSL	confirmed	no	vendor	no	vendor	-	no
Ethernet	confirmed	vendor	vendor	confirmed	confirmed	confirmed	confirmed
FTTx	243	vendor	vendor	no	no		no
WAN Layer 3		rh.					
PPPoA	confirmed	no	vendor	no	vendor	confirmed	no
PPPoE	confirmed	confirmed	vendor	confirmed	confirmed	confirmed	vendor
RFC1483/bridge	vendor	no	vendor	no	no	vendor	no
RFC1483/routed	00		vendor	vendor	vendor	vendor	no
Plain IP	1000 C	vendor	vendor	confirmed	confirmed	confirmed	no



# IPv6 RIPEness



- Only listing countries with 5+ LIRs
- Large variation
   between countries
- Overall
  - 27% have at least 1
    - star
  - 73% still have 0 stars





### RIPE ATLAS - Active Measurements

- New project to build next generation Internet measurements prototype
- Aim to support 110k (or more) measurement nodes around the Internet
  - can be hosted by ISPs, IXPs, individuals...
- Will be presented at RIPE 61
  - probes will be distributed starting in November





#### RIPE Database - New API and Tools

- Whois data via RESTful web interface
- RIPE Database queries including search
- Abuse Finder
  - Tool to find all abuse related contact information
- New and Improved Global Registry Service





# Routing, Anti-Spam, and more...

- ExaBGP (Thomas Mangin)
  - A new tool to interact with BGP
- BGP Route Origin Validation (David Murray)
- Economic Incentives for Cooperation to fight Spam (John Quarterman)
- Background Radiation in IPv6 (Geoff Huston)
- IPv6 Crawler and Matrix (Olivier Crepin-Leblond)



### Recent Improvements

- New website launched recently
- Better navigation and search
  - Tag cloud, life search, long-term project pages
- Easier communication and participation
  - No need to register to leave comments on site
  - Registration only necessary for content submissions and Data Repository



# New RIPE Labs Homepage

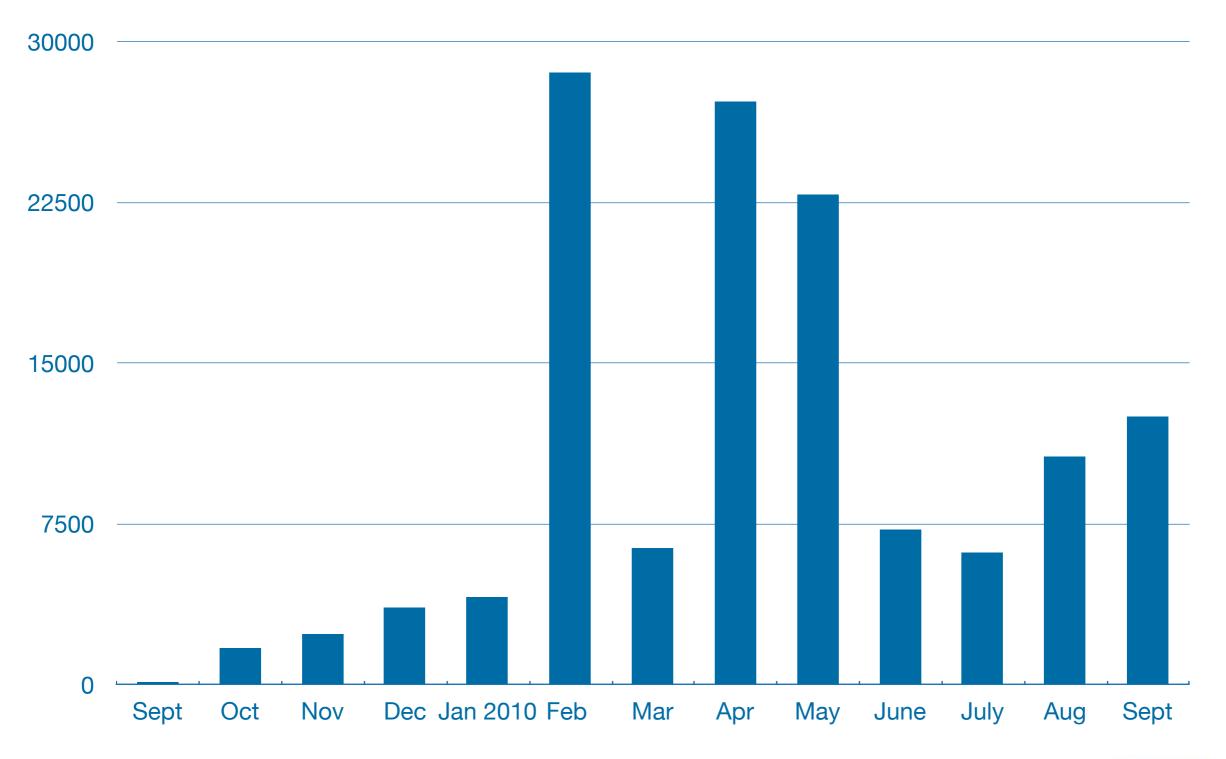
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Home • Users • Data Repository • RIPE Database • About		
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<ul> <li>RIPE Labs</li> <li>Innovative Internet tools &amp; ideas</li> <li>Share experi-</li> <li>Showcase to</li> <li>Present reserved</li> </ul>	ols	
ontents view edit syndication rules sharing display <b>v</b> add new	• tagcloud	Follow us on Twitter Subscribe to @mir_ripe_labs
IPv6 CPE Surveys         Mirjam Kühne – 18 October 2010 10:58	api apnic arin asns cpe dns dnssec database	New resource #certification system released (#rpki). Read more details on #RIPELabs: http://bit.ly/aJVvGl 15 October 2010 12:17
ease find below all previous versions of the IPv6 CPE arvey and matrix with the most recent version on top.	netsense » rex ripe 60 ripe db ripe meeting ripe	@patrikhson Yes, the addresses are included in the count, but special policy or changes in policy might extend the life-span of IPv4.
New Release of the Resource Certification System Alex Band – 15 October 2010 11:35	ncc ris rpst allocation atlas	#RIPELabs graph showing linear decline of IPv4 addresses now on



- Faster, tight innovation cycle
  - Provide useful prototypes to you earlier
  - Adapt to the changing environment more quickly
- Closer involvement of the community
  - Openness
  - Make feedback and suggestions easier and more effective

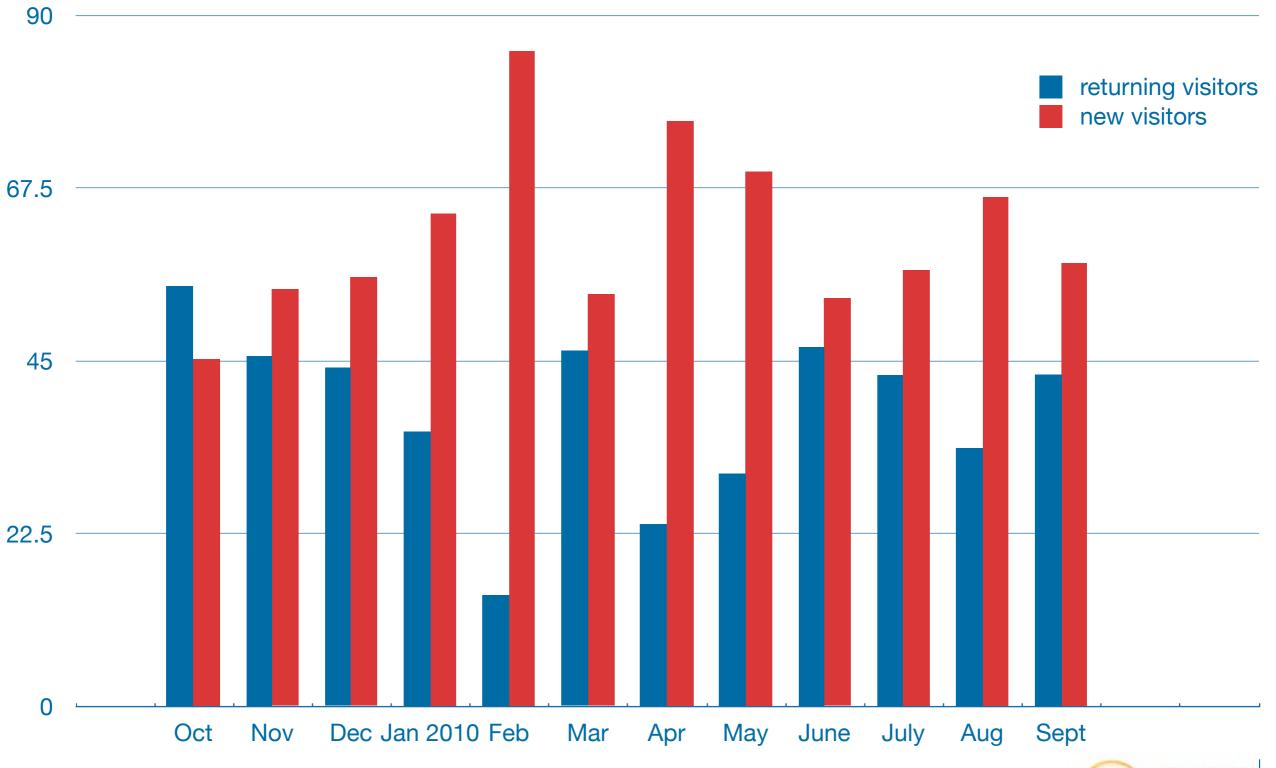


## Number of Unique Visitors





# Returning vs. New Visitors (%)





# Suggestion and Questions

- Please take a look and participate
- Leave a comment under an article
- Questions and suggestions to <u>labs@ripe.net</u>

http://labs.ripe.net/



# Questions?

