RIPE Labs
Operators Tools, Ideas, Analysis

IETF 80, IEPG, Prague, 27 March 2011

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What is RIPE Labs?

- It's a web site, but more importantly:
  - It is a platform and a tool **for the community**
  - Launched in Sept. 2009, major update in June 2010

- 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

Why RIPE Labs?

- Faster, tighter innovation cycle
  - Provide useful prototypes early in the development
  - Adapt to changing environment and requirements more quickly

- Closer involvement of the community
  - Openness
  - Make it easier and more effective to provide feedback and suggestions

http://labs.ripe.net

Project Pages

Twitter Feed

Tag Cloud

Comments

My Folder

Articles

Currently on RIPE Labs

tagcloud

cpe **dns** dnssec
database
rex rpsl **atlas**
certification
datarepository
ipv4 ipv6
measurements
policy reputation
ripestat
root-servers
routing
statistics
tools

- IPv4 and IPv6 measurements

- RIPE Database API and tools

- RIPE Atlas

- Statistics and Measurements

- Tools (RIPEstat and more)

- and much more...

6to4 Brokenness (Emile Aben)

- Measured that 15% of connections fail
- Recent analysis done on relation between firewall settings and 6to4

6to4 failure rate

http://labs.ripe.net/Members/emileaben/6to4-why-is-it-so-bad
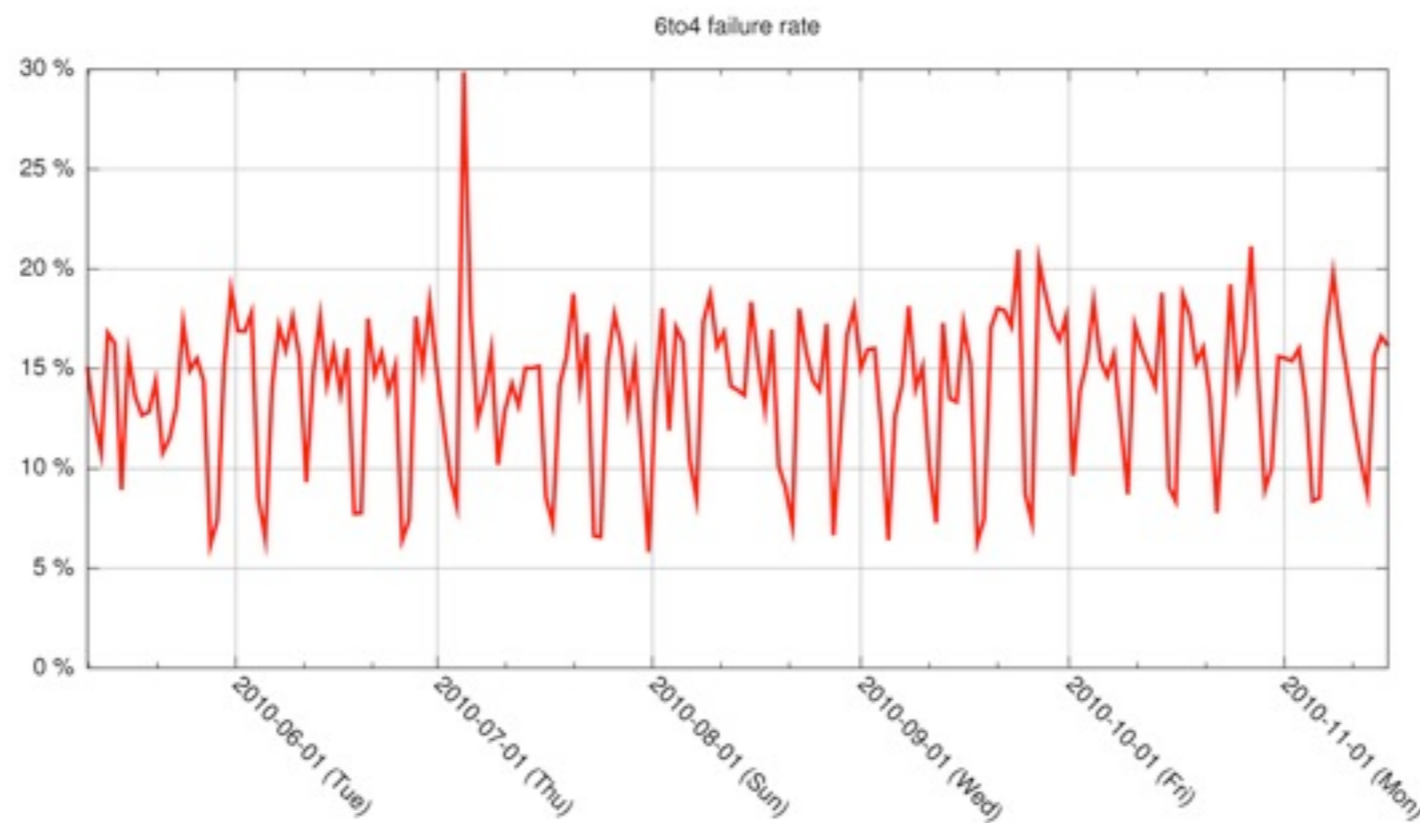
IPv6 enabled ASes in Global Routing

- Any country or region possible
- Updated daily, permalink provided

http://v6asns.ripe.net
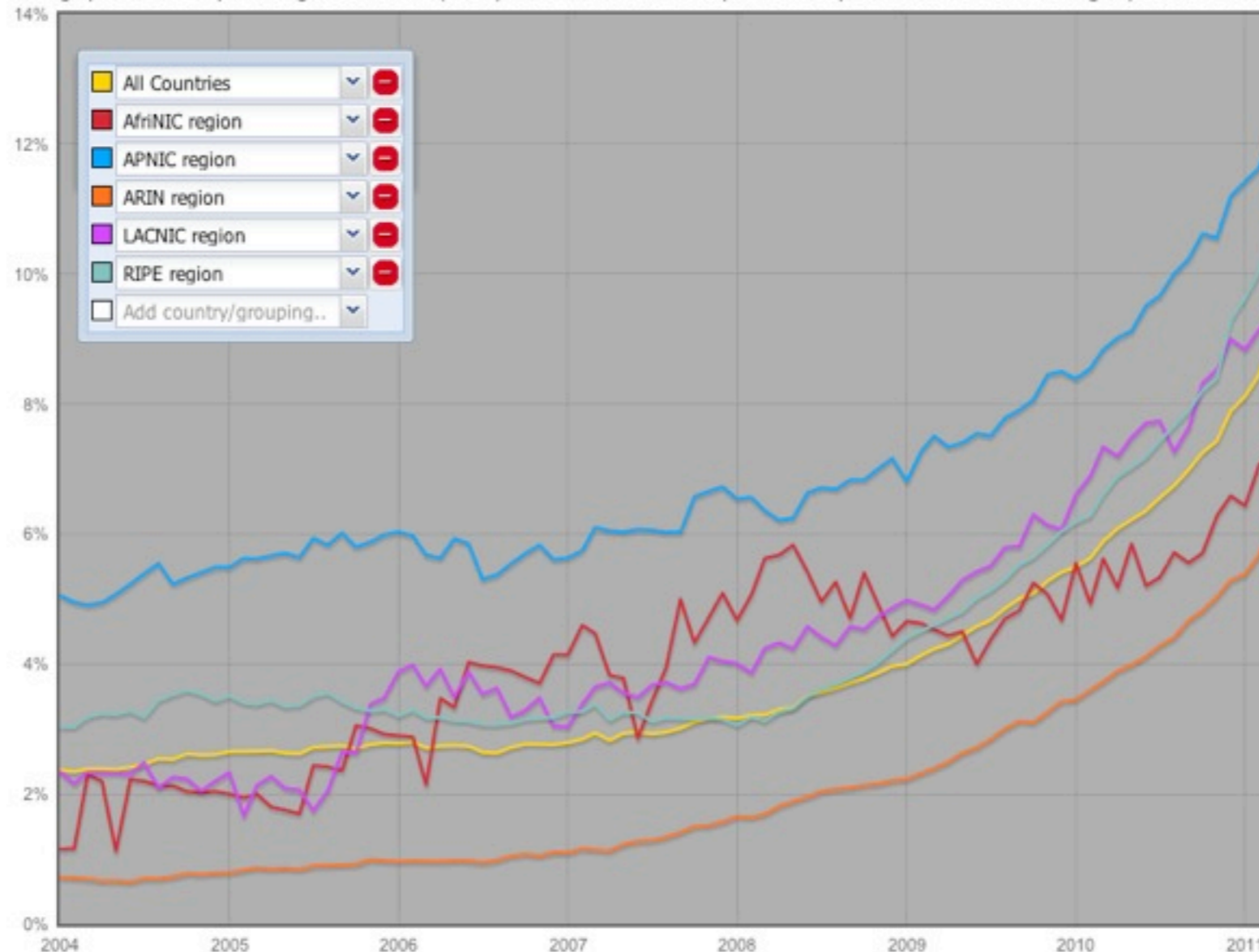
Caidagram (Claudio Squarcella & CAIDA)

- Visualising geographically annotated Internet measurements
  - Example shows IPv6 enabled ASes per continent

http://labs.ripe.net/Members/csquarce/caidagram-visualization-tool
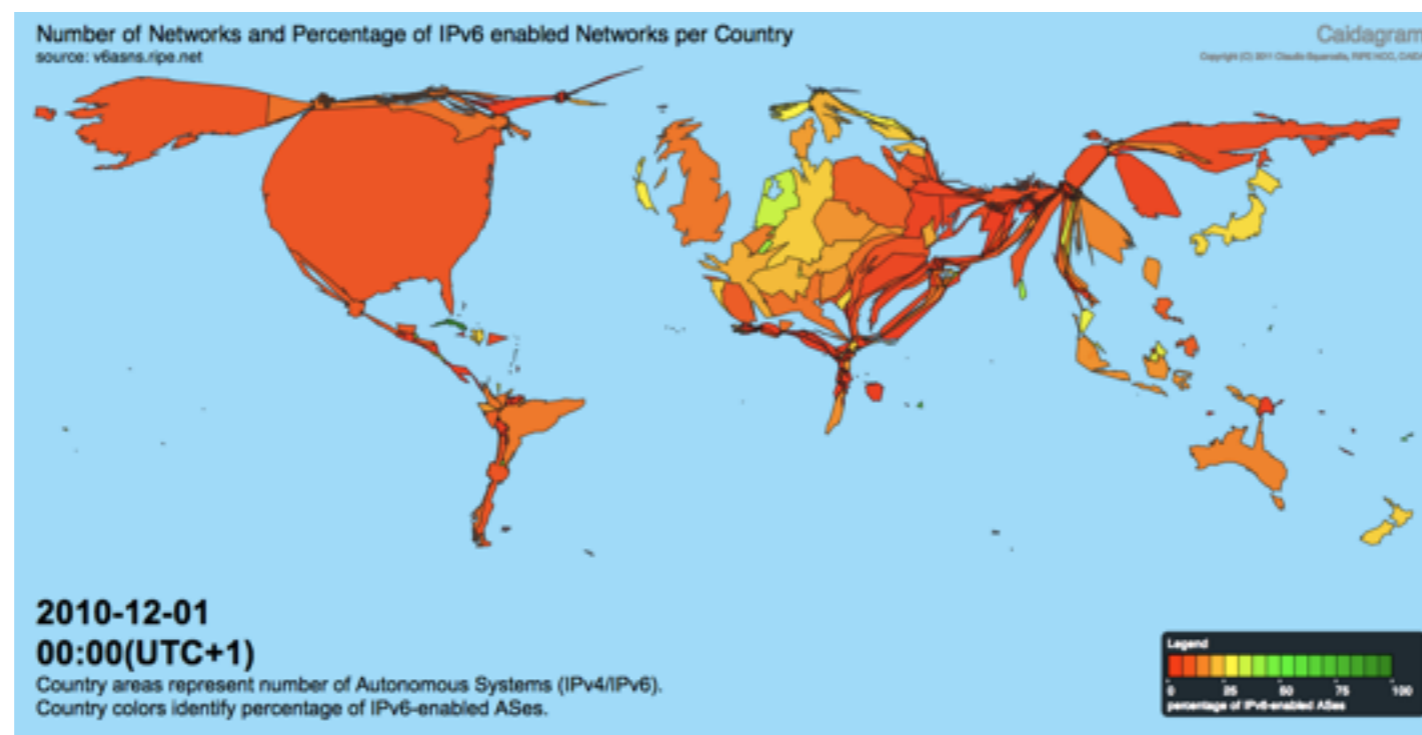
Network Complexity (Michael Behringer)

- How to deal with network complexity
    - A function of three elements (see image)
    - Now mostly theoretical
    - Looking for more input from operators
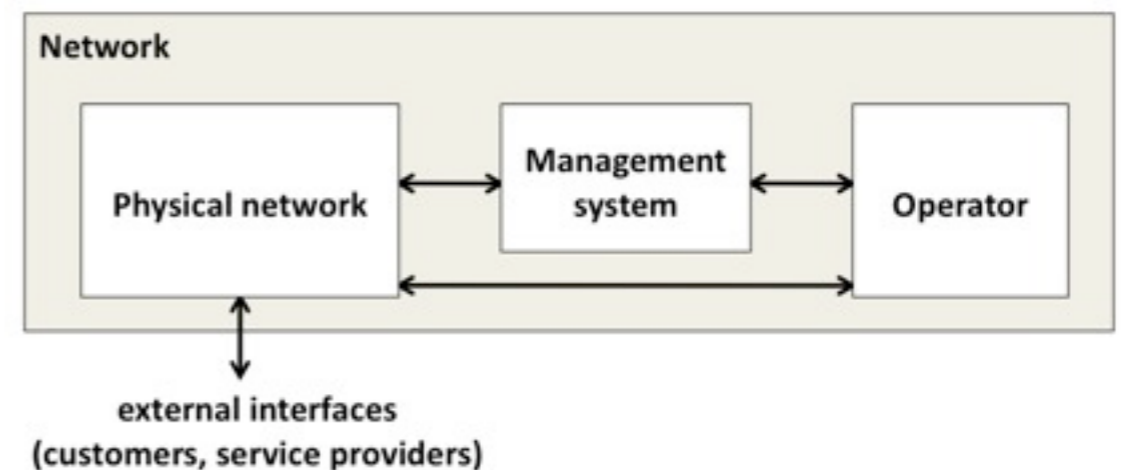
- Workshop/BoF planned for RIPE 62

http://labs.ripe.net/Members/mbehring/network-complexity-and-how-to-deal-with-it

RIPE ATLAS - Active Measurements

- New project to build next generation Internet measurement network (started in Nov.)
    - Aims to supports thousands of measurement nodes
    - Can be hosted by ISPs, IXPs, individuals...

- Currently 350 active probes worldwide

    http://labs.ripe.net/atlas

    http://atlas.ripe.net/

RIPEstat - stat.ripe.net

- Modular and Extendable Toolbox
    - Developed together with community - you!

- Shows IPv4/IPv6 and ASN info
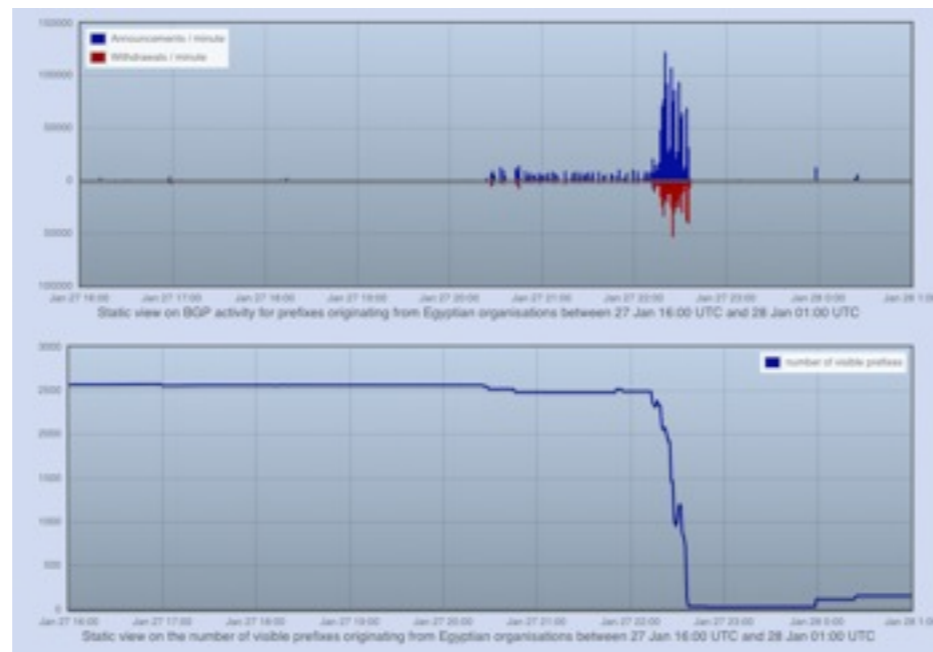   - Statistics (time, aggregation, zoom)
    - Status (real-time, aggregation, zoom)

Reputation System to Fight Spam

- Work done by John Quarterman and U-Texas
  - Economic incentives for providers
  - Various organisational layers
  - ASN rankings and spam blocklists

	ASN	CC	Description		ASN	CC	Description
1	9829	IN	BSNL-NIB	1	7643	VN	VNPT-AS-VN
2	24560	IN	AIRTELBROADBAND-AS-AP	2	9829	IN	BSNL-NIB
3	7738	BR	T da Bahia S.A.	3	24560	IN	AIRTELBROADBAND-AS-AP
4	7643	VN	VNPT-AS-VN	*4	17974	ID	TELKOMNET-AS2-AP
5	6849	UA	UKRTELNET JSC UKRTELECOM	*5	2856	GB	BT-UK-AS
*6	27699	BR	T DE SAO PAULO SA	6	25019	SA	SAUDINETSTC-AS
*7	9050	RO	RTD ROMTELECOM S.A	7	6849	UA	UKRTELNET JSC UKRTELECOM
*8	5384	AE	EMIRATES-INTERNET	*8	12322	FR	PROXAD Free SAS
*9	8167	BR	TELESC	*9	18403	VN	FPT-AS-AP
10	25019	SA	SAUDINETSTC-AS	10	7738	BR	T da Bahia S.A.

http://labs.ripe.net/Members/jsq

Sunday, March 27, 2011

Suggestion and Questions

- Please take a look and **participate**

- Leave a comment under an article

- Questions and suggestions to **labs@ripe.net**

http://labs.ripe.net/

Questions?