



Measurement Network update

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Information Services

Quick Introduction

- Active and passive measurements
- Test Traffic Measurements (TTM):
 - Measures one-way delay & other metrics
 - Mesh of ~90 boxes
- DNSMON:
 - Monitors root and TLD name servers
 - ~90 probes, using the TTM cloud
- Routing Information Service (RIS):
 - Receives, stores and analyses BGP updates
 - 600 peers in 15 locations

Highlights Since RIPE 59

- Reimplementing DNSMON
- New features in NetSense
- Experiments with 1/8 and 2/8
 - 1/8 resulted in popular RIPE labs article:
<http://labs.ripe.net/content/pollution-18>
 - Also see Geoff/APNIC's slides from the plenary

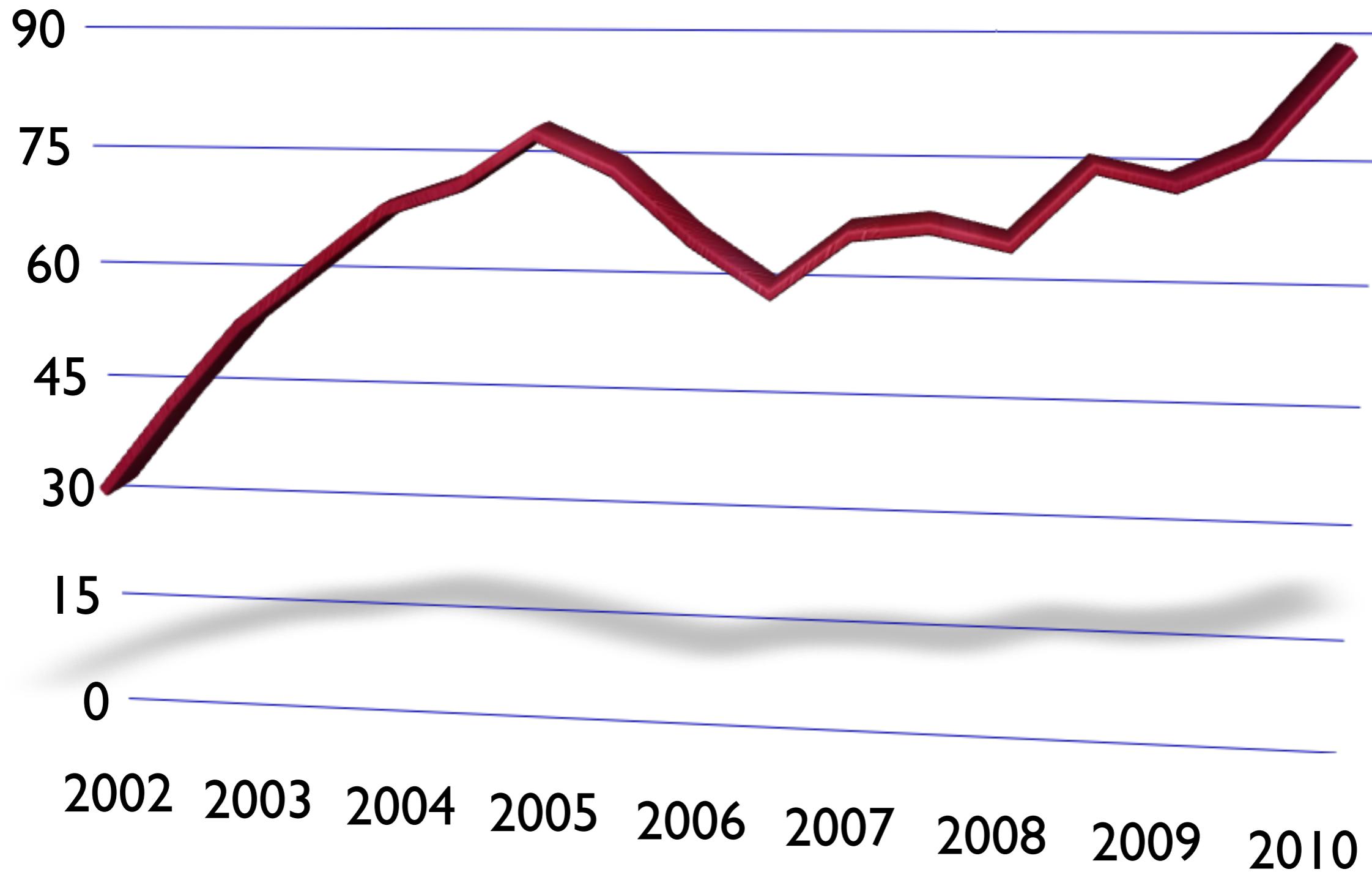
New Node Deployments

- Five new TTM boxes:
 - Dhakar (BD), Taipei (TW), Chennai (IN), Frankfurt (DE), Zug (CH)
- Working on TTM boxes in:
 - New Zealand, Singapore, Cambodia, Nepal
- RIR partnerships with APNIC, LACNIC, AfriNIC
- Working on replacement of older TTM boxes
 - Requires host cooperation
- RRC 14 (PAIX) replaced after hardware failure
 - Further lifecycle replacements planned

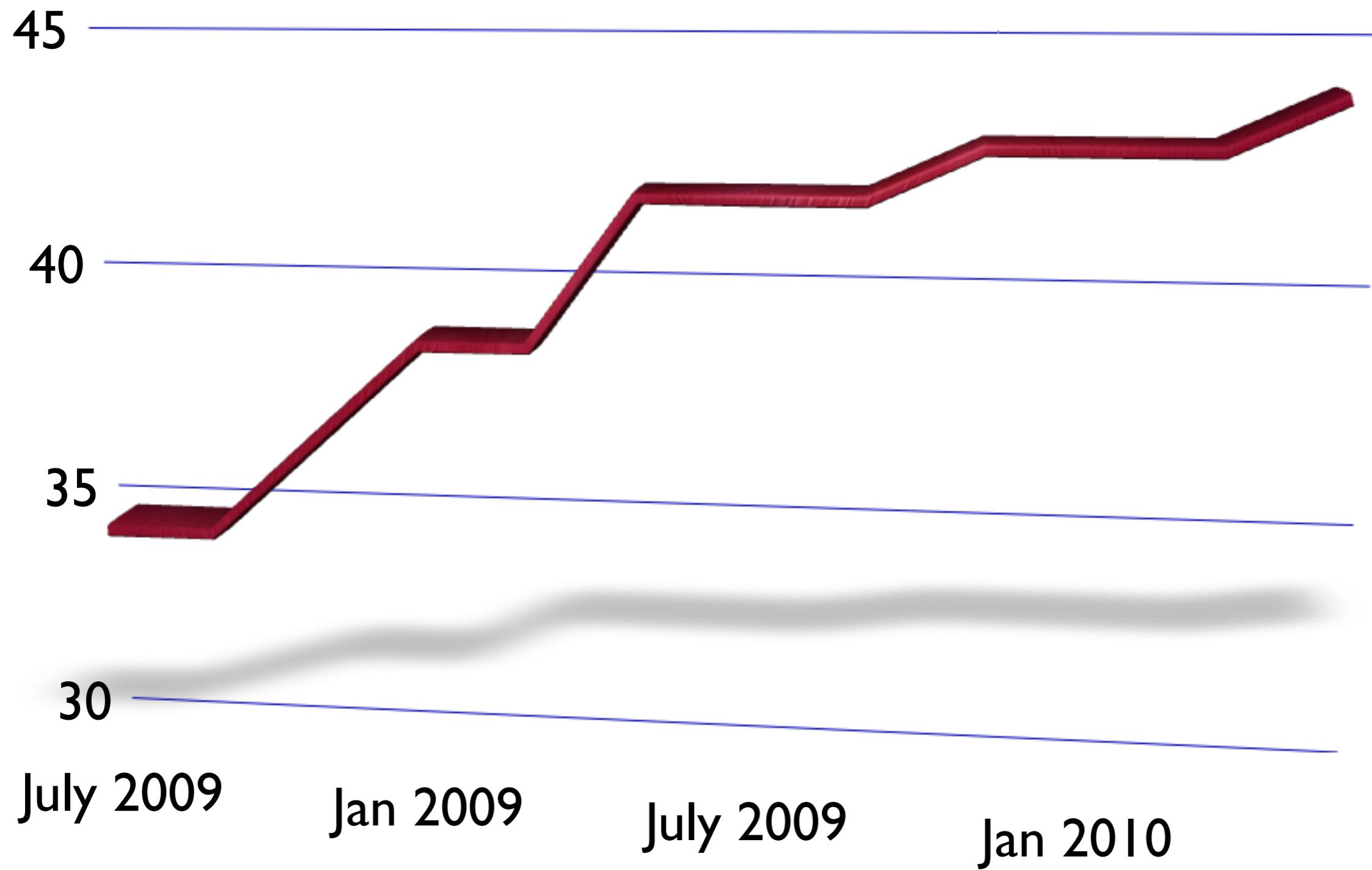
New deployments: Prague



Active TTM Boxes



DNSMON Subscribers



Reimplementing DNSMON

- Frontend and processing backend
- Designed to be more:
 - Flexible
 - Scalable
 - Usable
- Survey conducted to gather user needs
- More detail from Franz Schwarzinger
 - DNS-WG at 11.00 today



DNSMON ui

[Login](#)

from tt01.ripe.net since yesterday for nl

[Plot](#)[\[customize plot\]](#) Include anycast instance data

nl (domain)

ns-nl.nic.fr (server)

ns1.nic.nl (server)

ns2.nic.nl (server)

ns3.nic.nl (server)

ns4.nic.nl (server)

sss-nl.nic.at (server)

IPv4

 Unanswered Queries | Response Time Last Month | Last Week | Today | Last Hour

Unanswered Queries (%) of 1 Probe(s)

1.0

probe (average of 55 servers)

New Features In NetSense

Find out information about your **AS or Prefix**

1103 Sense

AS1103 - SURFNET-NL SURFnet, Th...

Prefix	First Seen	Last Update
145.120.8.0/21	1 year ago	5 hours ago
145.88.0.0/15	1 year ago	5 hours ago
145.107.8.0/21	1 year ago	5 hours ago
145.118.0.0/16	1 year ago	5 hours ago
145.128.0.0/10	1 year ago	5 hours ago
145.102.128.0/24	1 year ago	5 hours ago
145.28.0.0/15	1 year ago	5 hours ago

<< < 1 2 3 4 5 6 7 8 9 10 > >>

Visibility of 145.120.8.0/21.



POWERED BY Google

DNS Lameness

Don't Filter | All Issues | Only Errors

Routing Consistency

Prefix	DNS Lameness	Status
194.171.52.0/24	No Lameness	Ok ✓
195.169.63.0/24	No Lameness	Ok ✓
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STABILITY

TERMS OF USE

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145.118.0.0/16	1 year ago	4 hours ago
145.128.0.0/10	1 year ago	4 hours ago
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145.28.0.0/15	1 year ago	4 hours ago

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BGP Updates for 145.120.8.0/21 (last 14 days)



Announcements / minute
Withdrawals / minute

DNS Lameness

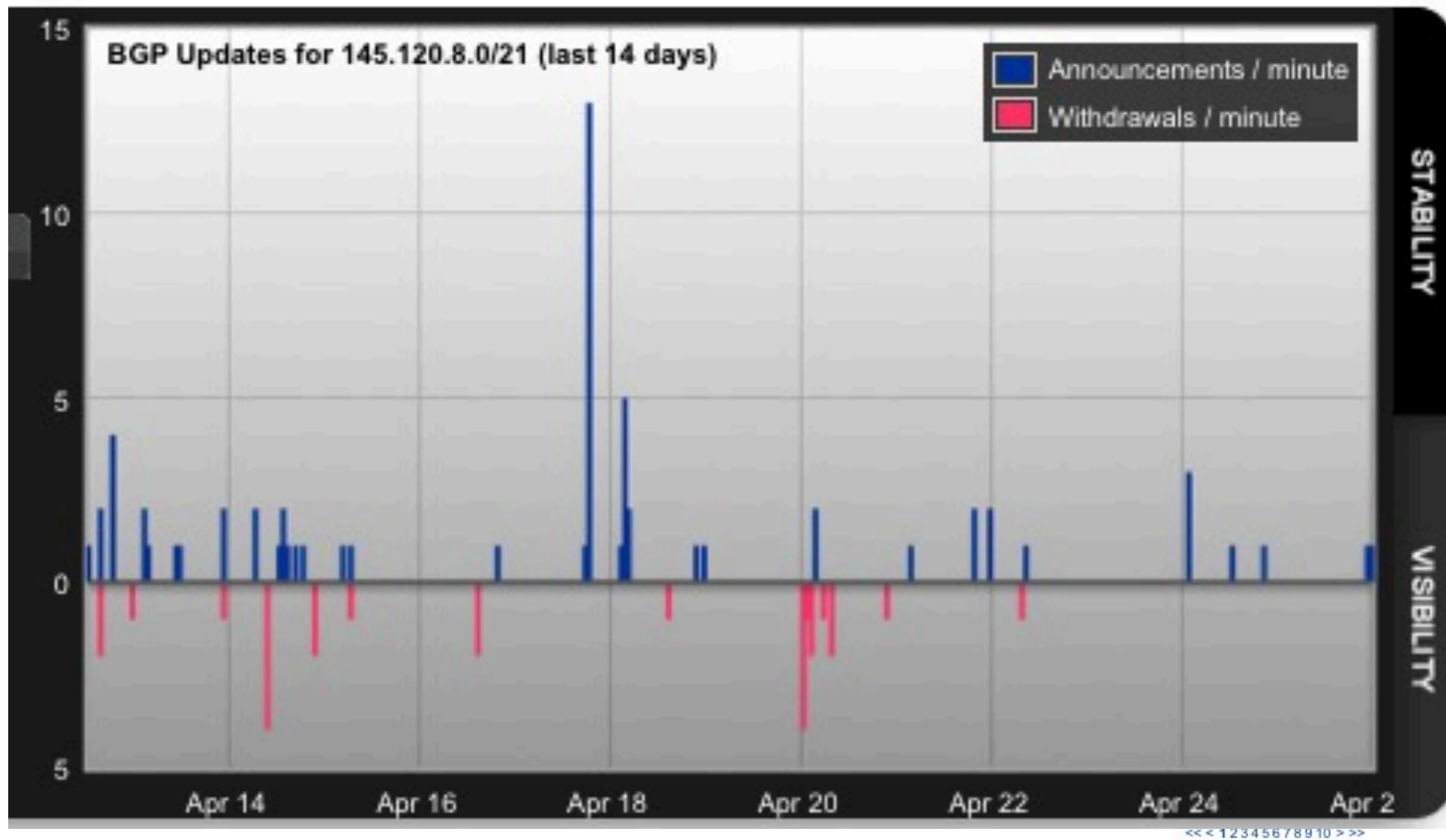
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Routing Consistency

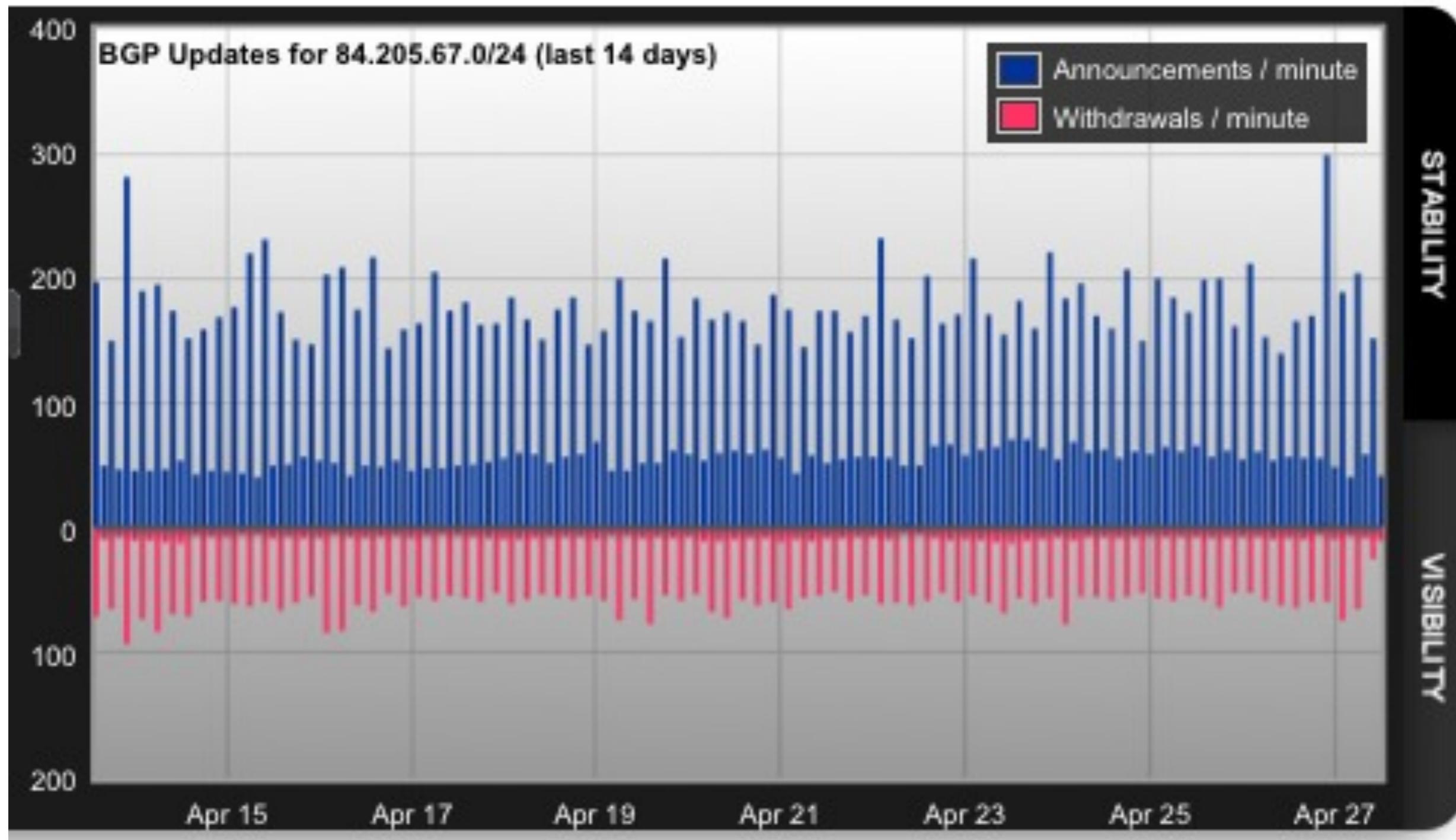
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New Features In NetSense



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New Features In NetSense

Find out information about your *AS or Prefix*

Sense

AS3333 - RIPE-NCC RIPE Network ...

Prefix	First Seen	Last Update	Remarks	Visibility	Stability	Consistency	Overlaps	Location
193.0.22.0/23	4 months ago	6 hours ago	All Ok	✓	✓	✓	✓	0 Amsterdam
193.0.18.0/23	1 year ago	6 hours ago	All Ok	✓	✓	✓	✓	0 Amsterdam
193.0.12.0/23	1 year ago	6 hours ago	All Ok	✓	✓	✓	✓	0 Amsterdam
193.0.20.0/23	1 year ago	6 hours ago	All Ok	✓	✓	✓	✓	0 Amsterdam
2001:610:240::/42	2 weeks ago	6 hours ago	All Ok	✗	✓	✗	✗	0 Amsterdam
193.0.0.0/21	1 year ago	6 hours ago	All Ok	✓	✓	✓	✓	0 Amsterdam

Visibility of AS3333.

POWERED BY Google

67%

STABILITY

100%

TERMS OF USE

DNS Lameness

Routing Consistency

Don't Filter | All Issues | Only Errors

Origin Prefixes ▾ **BGP Routing Table** ▾ **RIPE Database** ▾ **Status** ▾

193.0.18.0/23	193.0.18.0/23	Ok	✓
193.0.22.0/23	193.0.22.0/23	Ok	✓
193.0.20.0/23	193.0.20.0/23	Ok	✓
193.0.12.0/23	193.0.12.0/23	Ok	✓
2001:610:240::/42	Not present	Not present	✗
193.0.0.0/21	193.0.0.0/21	Ok	✓

New Features In NetSense



The screenshot shows a table of network check results and a map of Europe.

	Remarks	Visibility	Stability	Consistency	Overlaps	Location
1	All Ok				0	Amsterdam
2	All Ok				0	Amsterdam
3	All Ok				0	Amsterdam
4	All Ok				0	Amsterdam
5	All Ok				0	Amsterdam
6	All Ok				0	Amsterdam

POWERED BY

67%

A world map is visible in the background of the slide.

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New Features In NetSense

Prefix ↴	DNS Lameness ↴	Status ↴
2001:067c:0064::/48	Found 2 Errors	Lameness X

New Features In NetSense

Prefix ↗

2001:067c:0064::/48

DNS Lameness

Found 2 Errors

Lameness

Prefix: 2001:067c:0064::/48

server.ripemtg.ripe.net (193.0.24.2): No response
server.ripemtg.ripe.net (2001:67c:64:42:0:0:0:2): No response



Plans

- Finish and deploy new DNSMON
- Investigating TTM hardware
 - Easier to deploy
 - Less costly boxes
- TTM backend improvements
- Overall service performance
 - First focus: NetSense / RIS



Questions?

Contact us on: <is@ripe.net>

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