



Information Services Update

Mark Dranse
markd@ripe.net



History

RIPE DNS host count as of October 2, 1990

Country	Hosts	2nd level domains
at	566	2
be	2	0
ch	5312	8
de	384	28
dk	91	30
es	3	0
fi	358	30
fr	357	50
gr	43	7
ie	99	0
il	1	1
is	1	1
it	526	10
nl	3077	18
no	3949	36
pt	2	0
se	6112	34
uk	294	3
yu	2	0
	31724	258

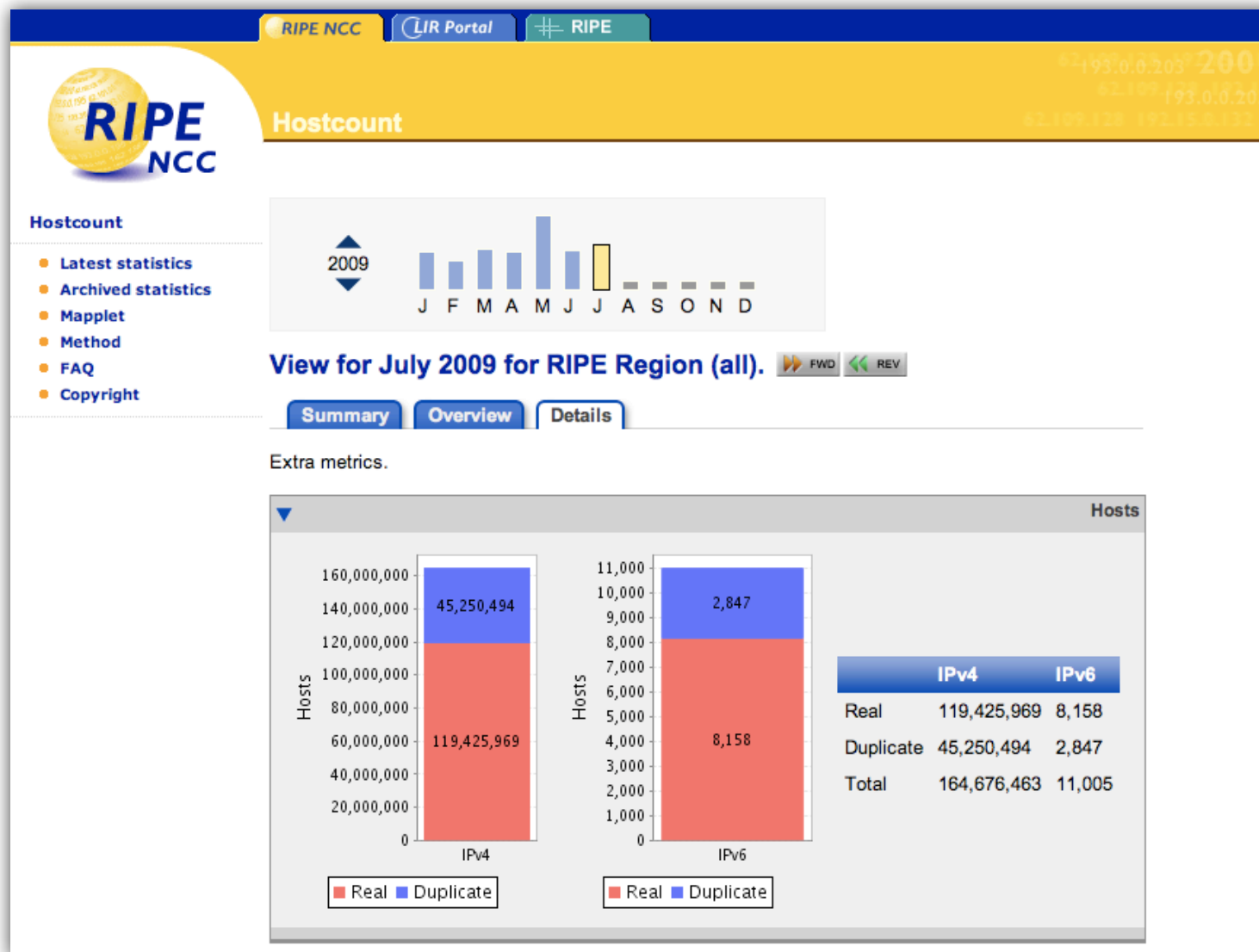
First Hostcount



1990



Hostcount



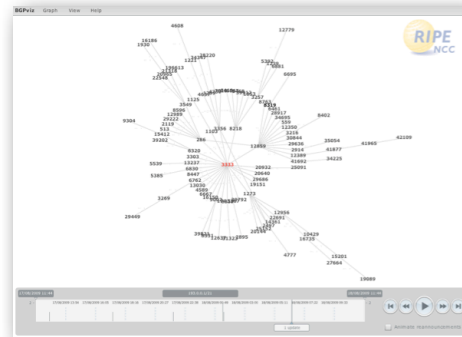
• <http://www.ripe.net/hostcount>



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First Hostcount

Routing Information Service

1990

1999



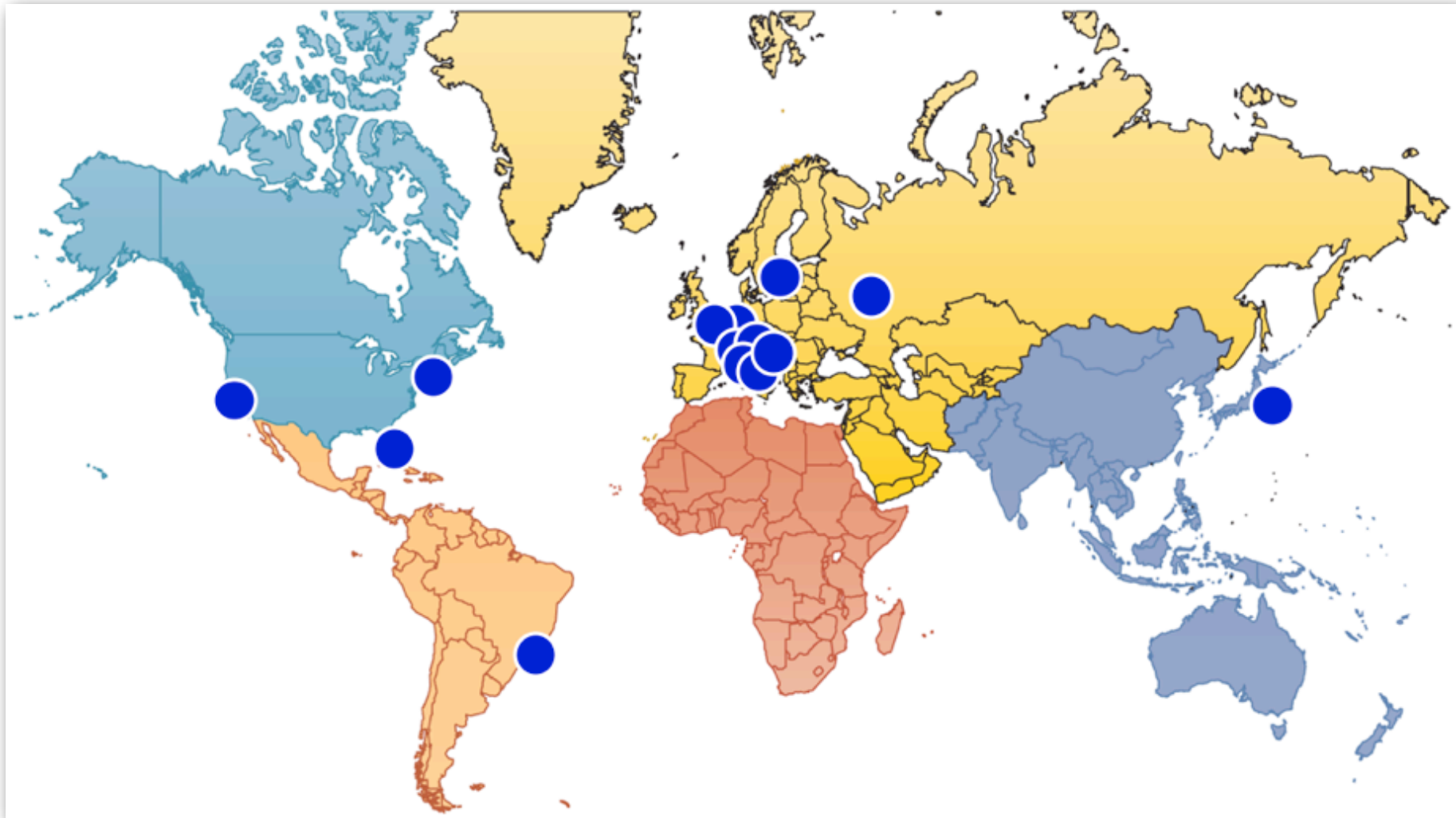
Routing Information Service - RIS

- Looking glass with history
- Collects routing information (BGP)
 - AS12654 has 600 peers
 - 15 Remote Route Collectors (RRCs) at IXPs
- 3 months live data searchable online
 - Powerful query tools
- All raw data available to everyone (> 1Tb)

<http://www.ripe.net/ris>



Routing Information Service - RIS





RIS Dashboards

Enter an ASN or prefix and see what RIS knows about it:

Tools

- [Visualize](#) routing updates seen by RIS
- [IS Alarms](#) includes **MyASN** alarm type for notifications on rogue announcements of your address space
- [Search](#) allows you to search for specific RIS data using several custom options
- [ASInUse](#) can determine whether an AS is currently in use on the Internet and provide statistical information about its neighbors
- [PrefixInUse](#) can determine when a prefix was last seen on the Internet and who originated it
- [Looking glass](#) allows you to directly query our route collectors
- [RISwhois](#) searches the latest RIS data for details of an IP address. It is useful when querying RIS from scripts. This also has a [web interface](#)

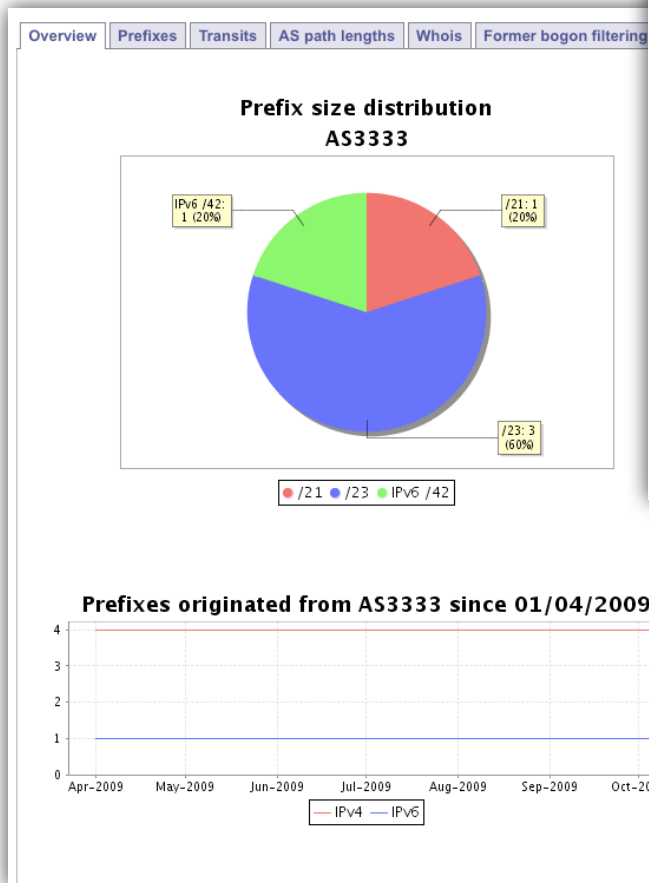
Reports/Stats

- [Weekly Statistics Report](#) weekly produced statistics concerning the state and changes of the global routing table
- [RIS report](#) BGP analysis graphs using the RIS data
- [De-Bogonising New Address Blocks](#) allows you to test reachability and view statistics for the visibility of new address blocks over the Internet

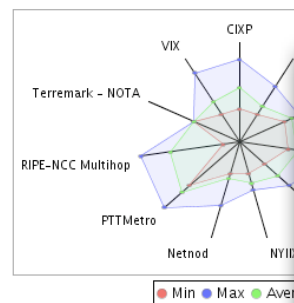
RIS Status

- [RIS Status Overview](#) lists maintenance announcements, outages and database insertion status

✉ Comments or suggestions can be made by using our [feedback form](#).

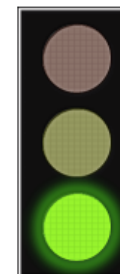


AS path length to RIS collectors AS3333



Prefix stability and visibility in the last 48 hours

✚ Explanation



Visibility

The visibility of this prefix is **100%**.

During the last 48 hours, **1 updates** per peer sending this prefix were found.



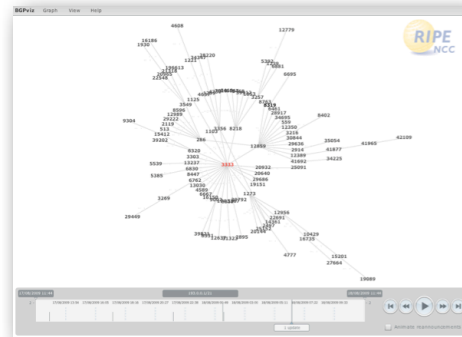
Stability



History

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de	38	28
dk	91	30
es	3	0
fi	3,568	30
fr	3,757	50
gr	4,93	7
ie	0	0
il	99	1
is	1	1
it	526	10
nl	3077	18
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First Hostcount

Routing Information Service

1990

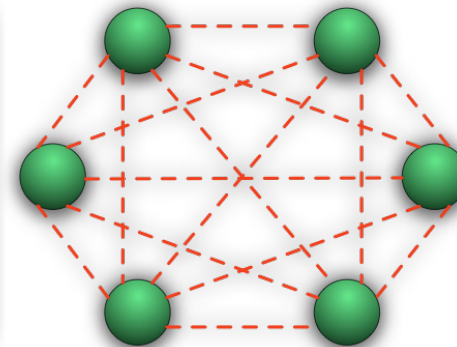
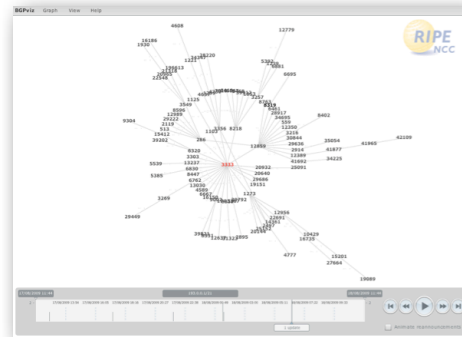
1999



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First Hostcount

Routing Information Service

Test Traffic Measurement

1990

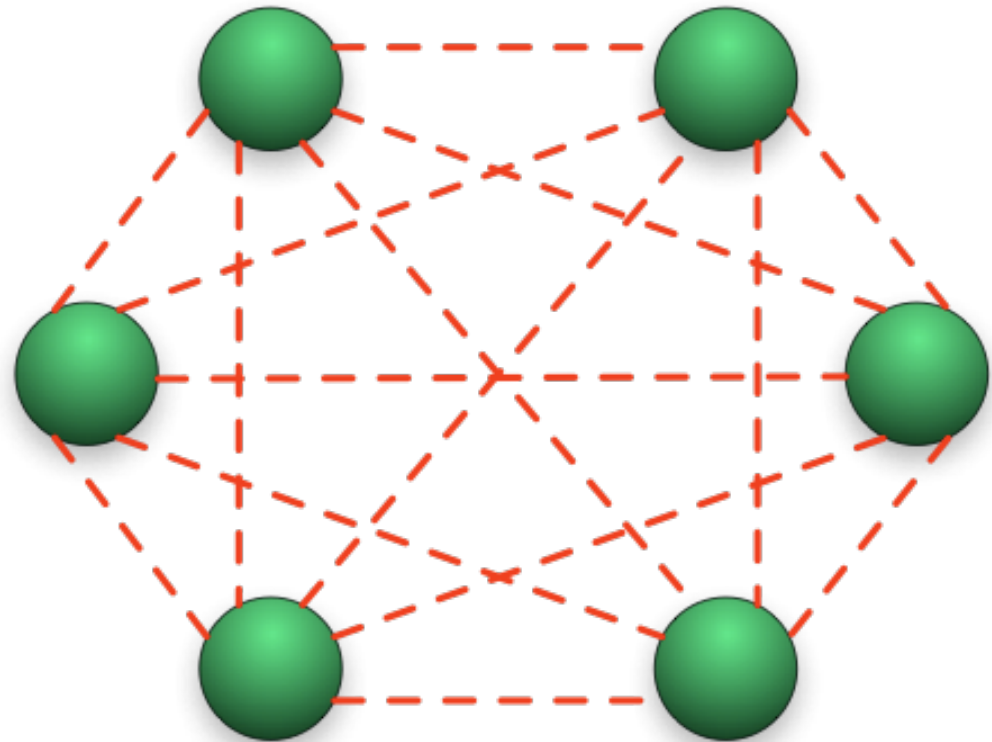
1999

2000



TTM - Test Traffic Measurements

- One-way measurements of delay/loss/jitter
- Uses GPS for timing
- All data freely available



<http://www.ripe.net/ttm>

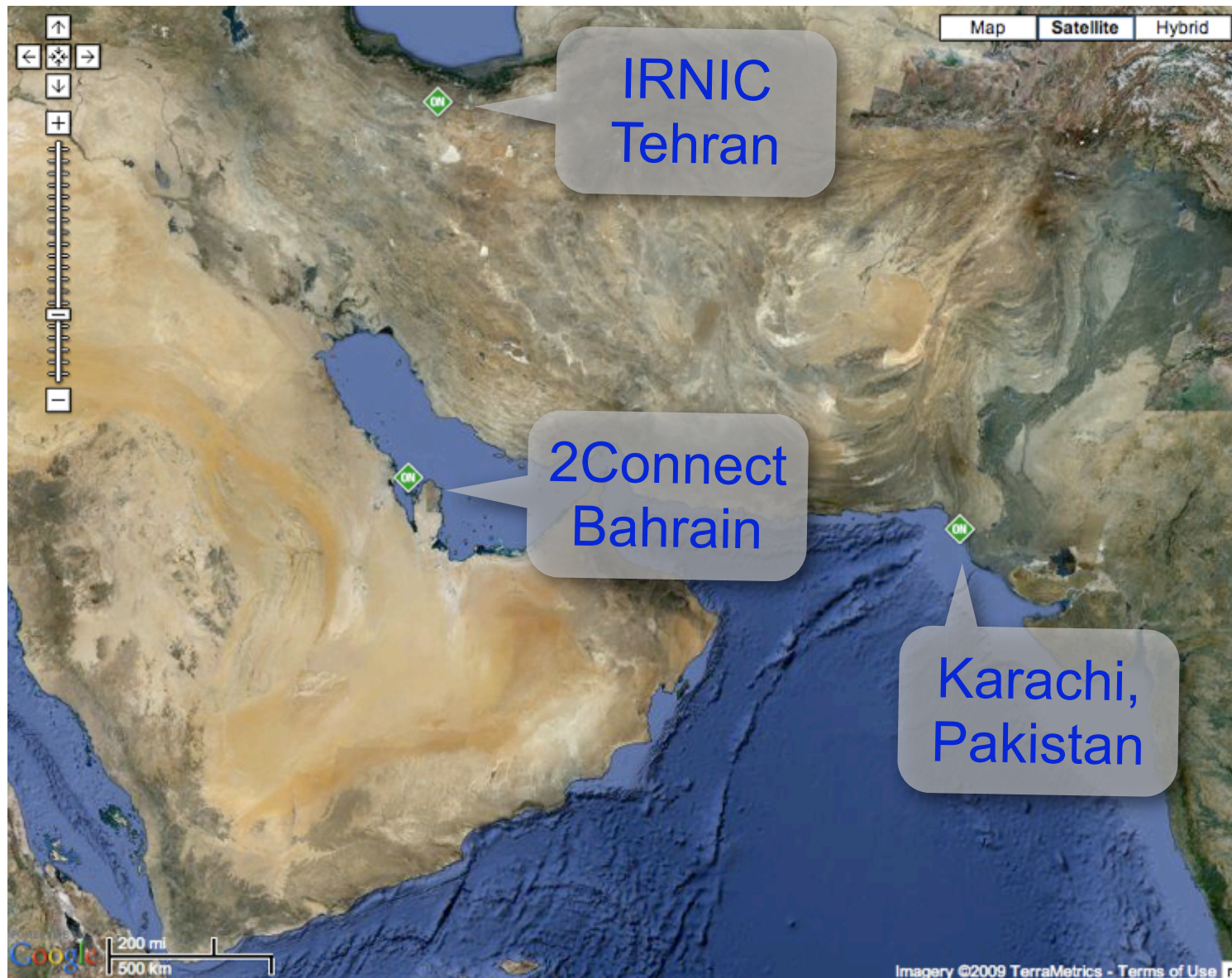


TTM - Test Traffic Measurements



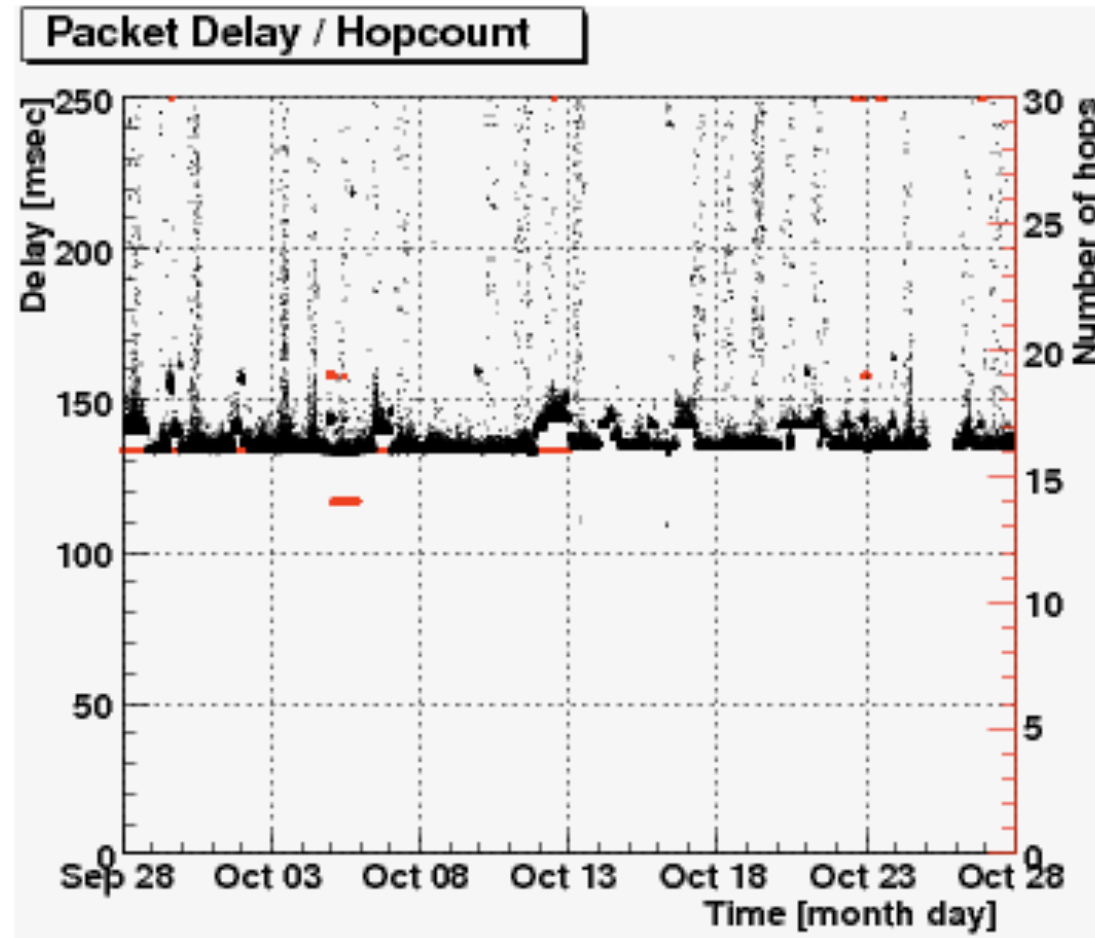


TTM - Test Traffic Measurements



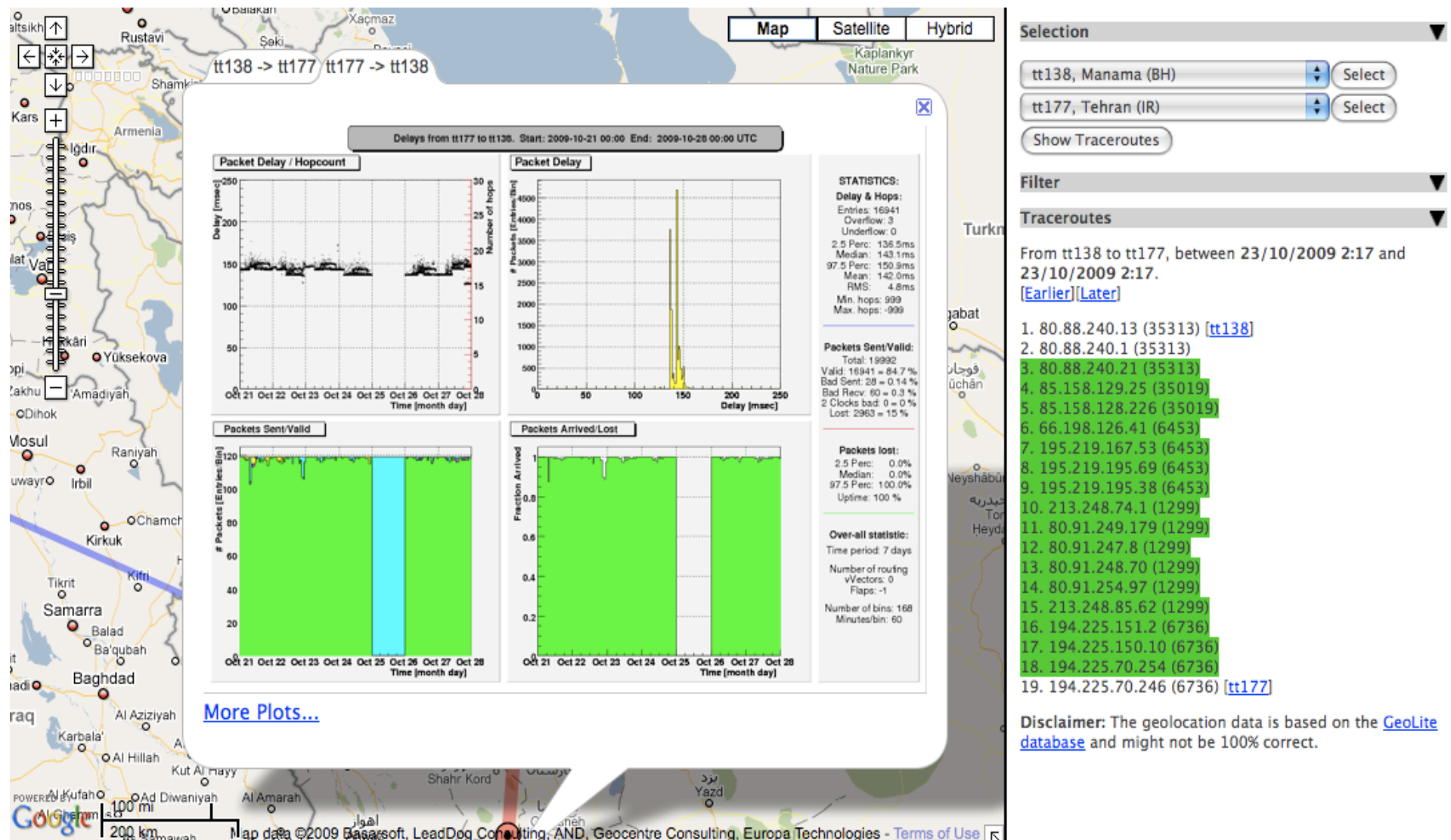


TTM – Bahrain to Iran



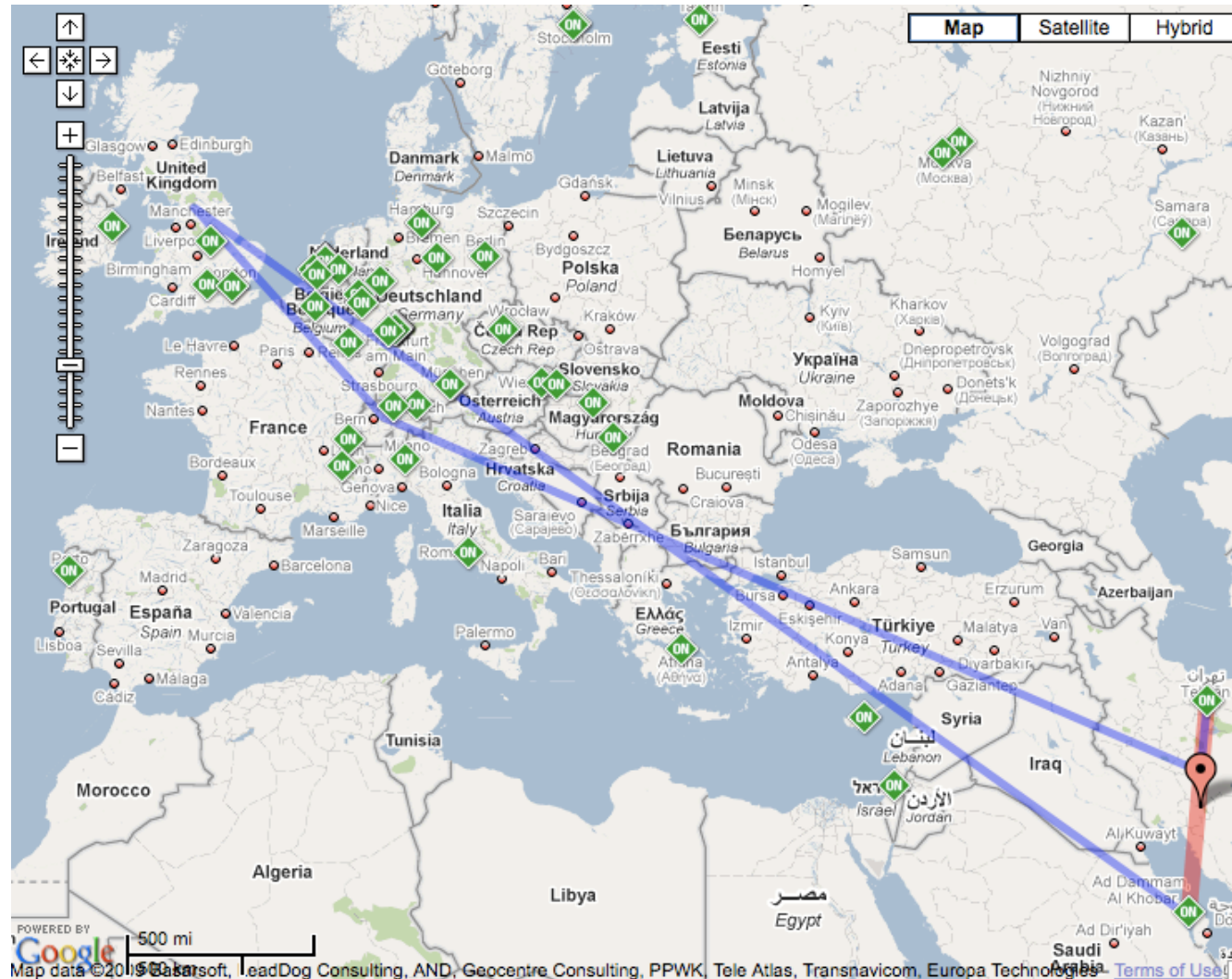


TTM - Test Traffic Measurements





TTM - Test Traffic Measurements



Selection ▼

tt138, Manama (BH) Select

tt177, Tehran (IR) Select

Show Traceroutes

Filter ▼

Traceroutes ▼

From tt138 to tt177, between 23/10/2009 2:17 and 23/10/2009 2:17.

[\[Earlier\]](#) [\[Later\]](#)

1. 80.88.240.13 (35313) [\[tt138\]](#)
2. 80.88.240.1 (35313)
3. 80.88.240.21 (35313)
4. 85.158.129.25 (35019)
5. 85.158.128.226 (35019)
6. 66.198.126.41 (6453)
7. 195.219.167.53 (6453)
8. 195.219.195.69 (6453)
9. 195.219.195.38 (6453)
10. 213.248.74.1 (1299)
11. 80.91.249.179 (1299)
12. 80.91.247.8 (1299)
13. 80.91.248.70 (1299)
14. 80.91.254.97 (1299)
15. 213.248.85.62 (1299)
16. 194.225.15.1.2 (6736)
17. 194.225.150.10 (6736)
18. 194.225.70.254 (6736)
19. 194.225.70.246 (6736) [\[tt177\]](#)

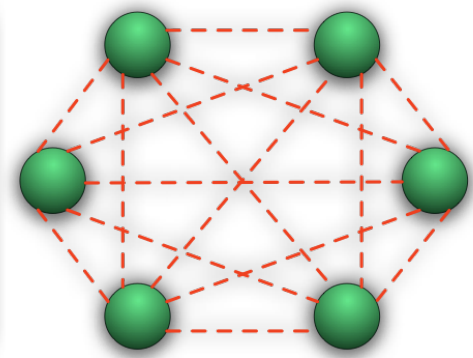
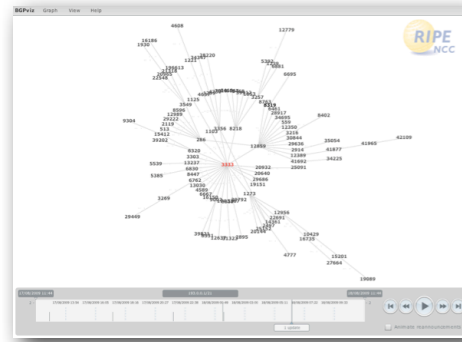
Disclaimer: The geolocation data is based on the [GeoLite database](#) and might not be 100% correct.



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First Hostcount

Routing Information Service

Test Traffic Measurement



1990

1999

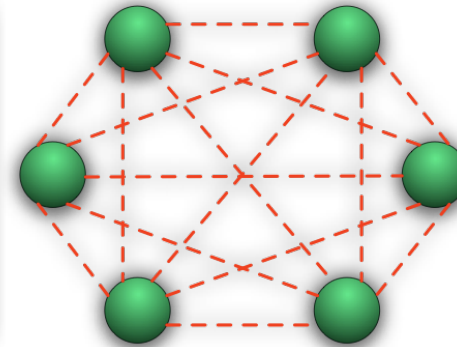
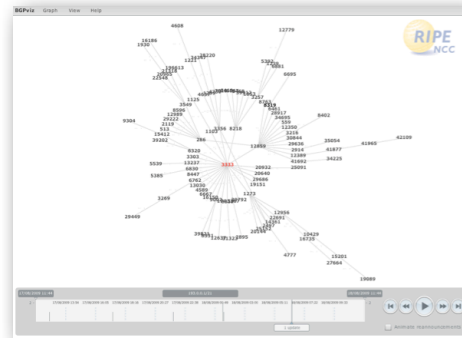
2000



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First Hostcount

Routing Information Service

Test Traffic Measurement

DNS Monitoring

1990

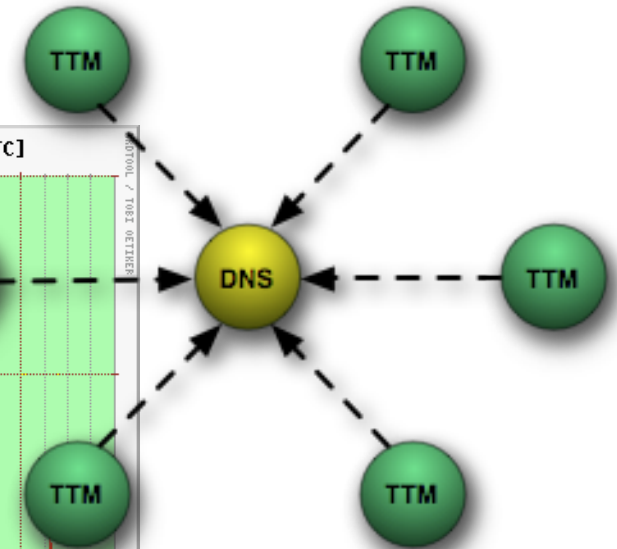
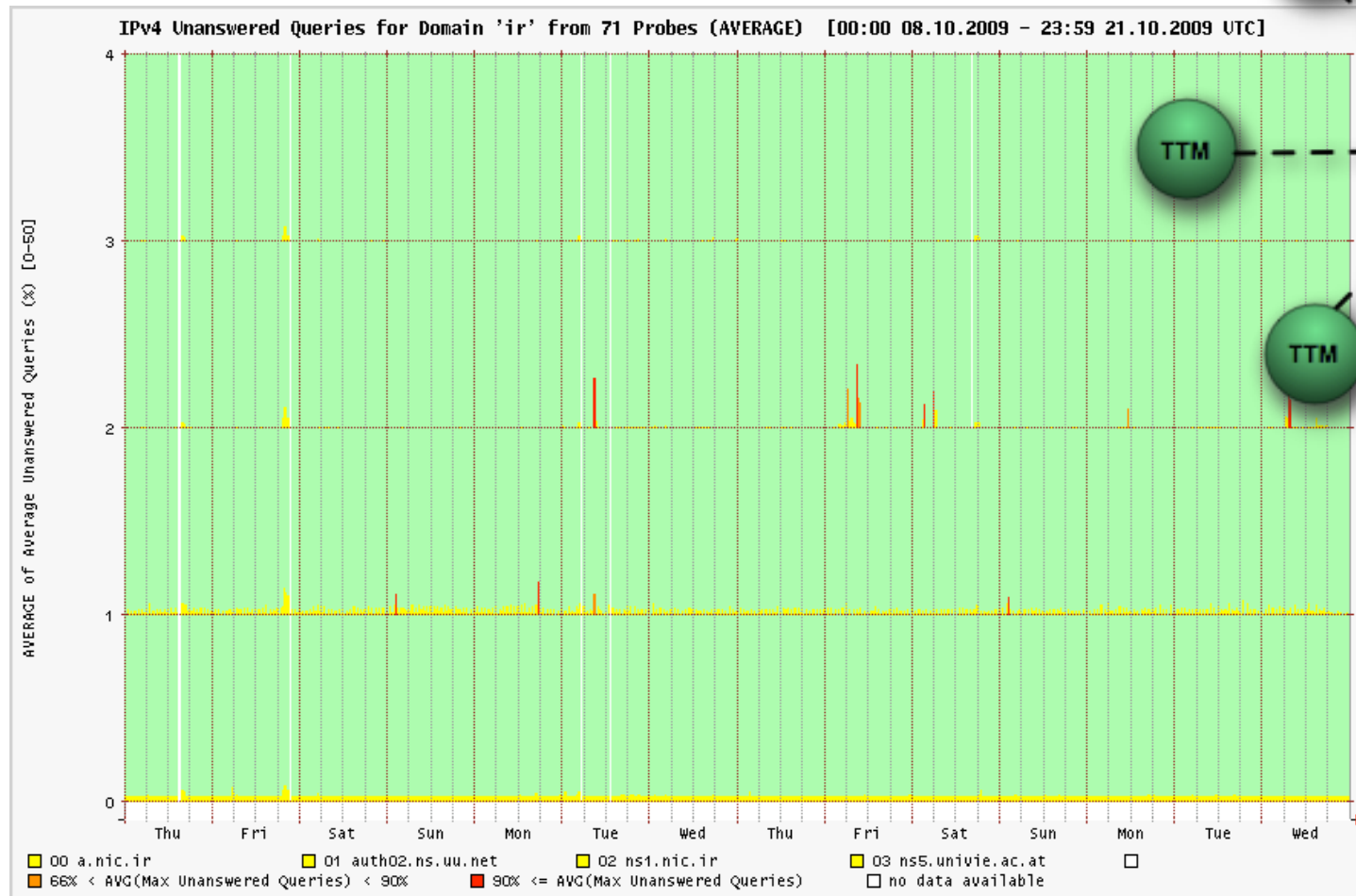
1999

2000

2004

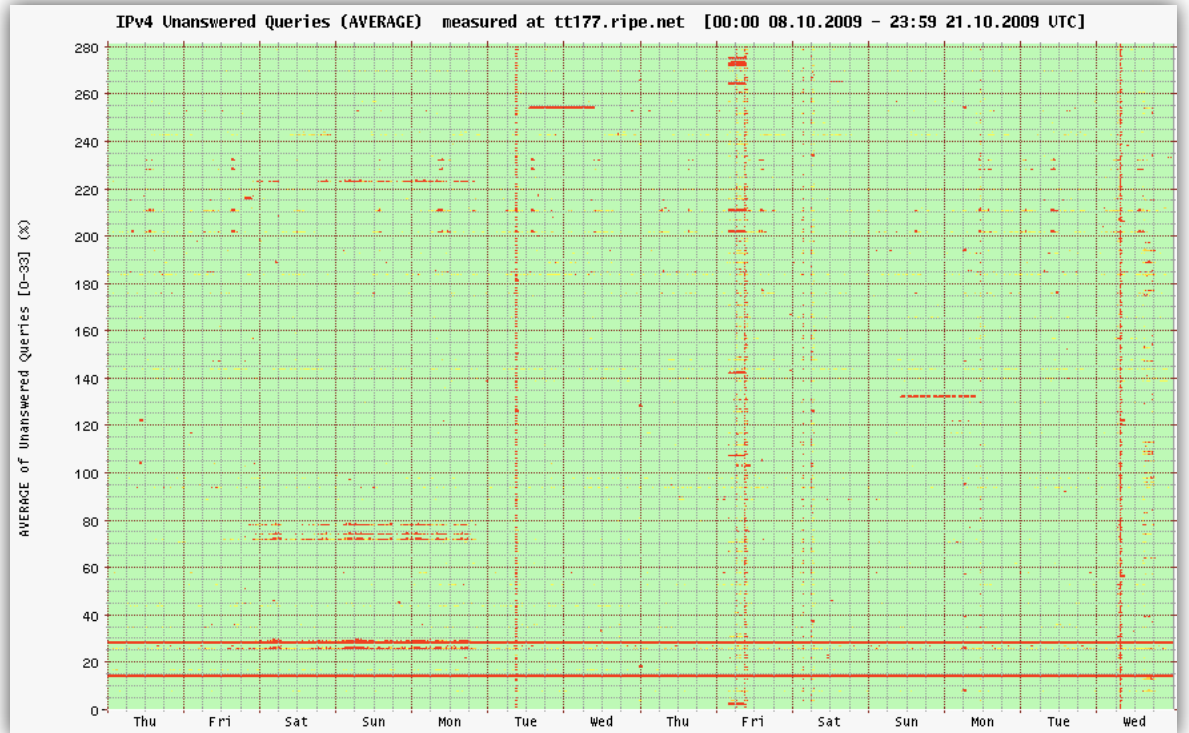
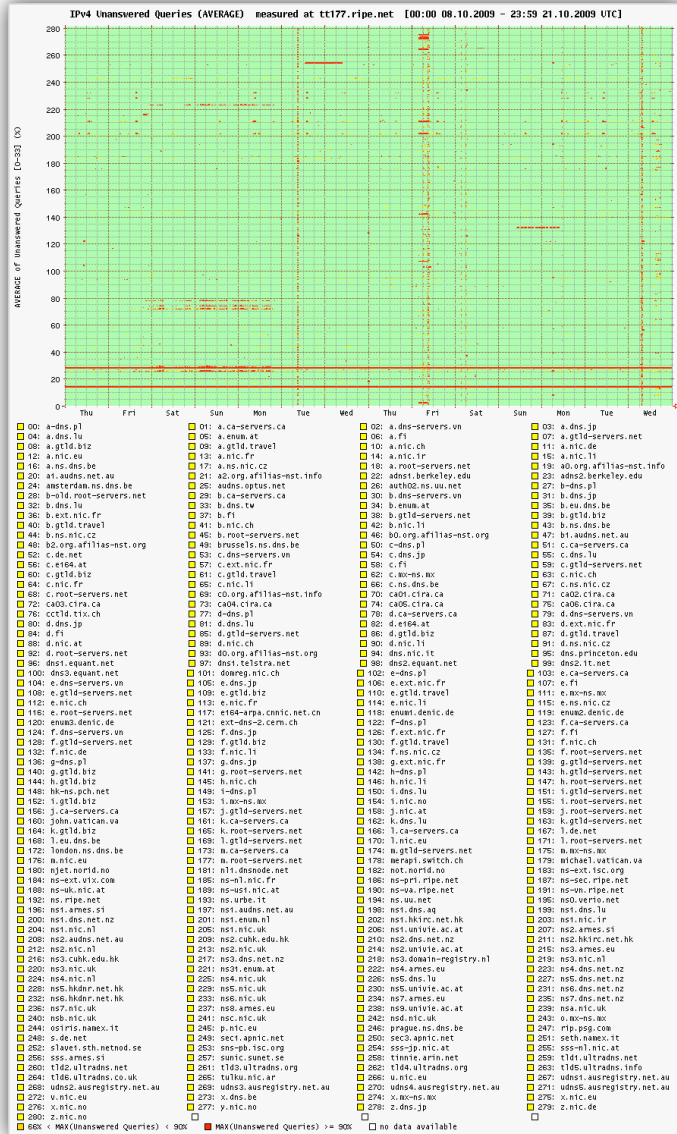


Methodology



<http://dnsmon.ripe.net>

DNSMON

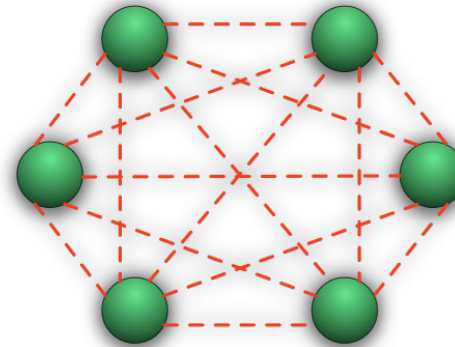
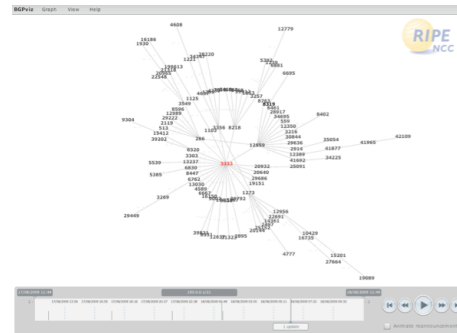




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First Hostcount

Routing Information Service

Test Traffic Measurement

DNS Monitoring

Information Services

1990

1999

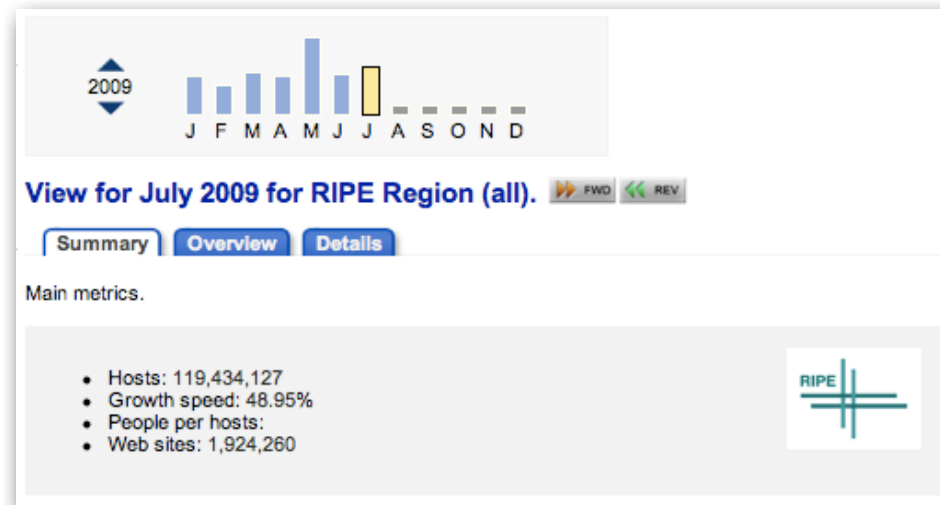
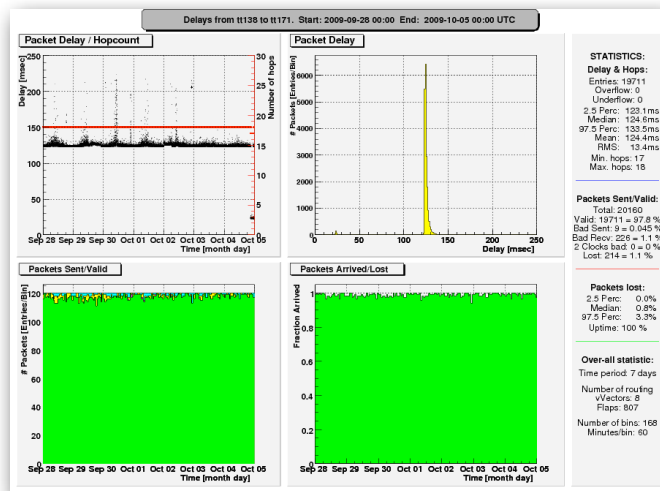
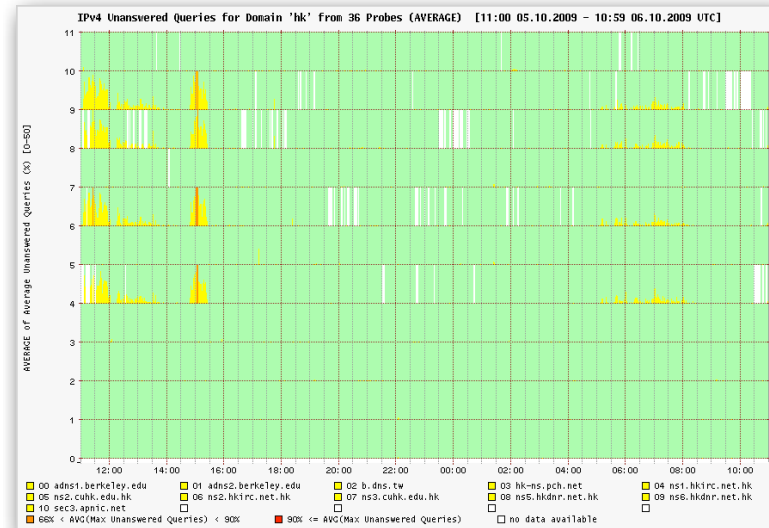
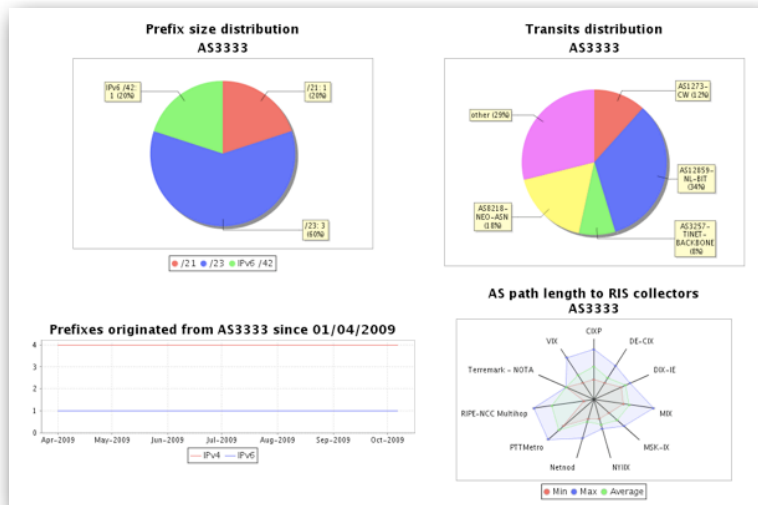
2000

2004

2006



Visualisation





NetSense - First Draft

AS3333

This is the RIPE NCC AS3333

Prefix <>	Last Seen <>	
193.0.0.0/21	2 hours ago	✓
193.0.18.0/23	1 hour ago	✓
193.0.12.0/23	15 minutes ago	i
193.0.20.0/23	3 months ago	✓
2001:610:240::/42	5 minutes ago	i

1 - 2 - 3 - ... - 8 - 9

2 Inconsistencies

⚠️ ? 🔥 ✓

Stability
Visibility
BGPViz

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Consistency
AS Path Length
Transits

Don't filter
 All inconsistencies
 Routing Table
 Database

BGP Routing Table <>	RIPE Database <>
193.0.0.0/21	Not present
Not found	193.0.18.0/23
193.0.12.0/23	193.0.12.0/23
193.0.20.0/23	193.0.20.0/23
2001:610:240::/42	2001:610:240::/42

1 - 2 - 3 - ... - 8 - 9



NetSense

RIPE NCC NetSense

You Are Here: [Home](#) -> [NetSense](#)

Quick Links

[Send us feedback](#)

Find out information about your AS or Prefix

3333

Sense

AS33333 - RIPE-NCC RIPE Network ...

Prefix	First Seen	Last Update
193.0.0.0/21	20 Mar 2009	7 hours ago
193.0.12.0/23	20 Mar 2009	7 hours ago
193.0.18.0/23	20 Mar 2009	7 hours ago
193.0.20.0/23	20 Mar 2009	58 minutes ago
2001:610:240::/42	20 Mar 2009	1 hour ago

Visibility of 33333.



PROTOTYPE

Routing Consistency

- Don't Filter
- All inconsistencies
- Routing table
- Database
- Only consistencies

Origin Prefixes

Import Peers

Export Peers

BGP Routing Table :

RIPE Database :

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

<http://netsense.ripe.net>



NetSense

Find out information about your *AS or Prefix*

Sense





NetSense

Find out information about your *AS or Prefix*

3333

Sense

AS3333 - RIPE-NCC RIPE Network ...

Prefix ▾	First Seen ↑	Last Update ↑
193.0.0.0/21	20 Mar 2009	5 hours ago
193.0.12.0/23	20 Mar 2009	5 hours ago
193.0.18.0/23	20 Mar 2009	5 hours ago
193.0.20.0/23	20 Mar 2009	6 hours ago
2001:610:240::/42	20 Mar 2009	2 hours ago

Visibility of 3333.



Routing Consistency ▶

- Don't Filter All inconsistencies
 Routing table Database
 Only consistencies

Origin Prefixes ▾

Import Peers

Export Peers

BGP Routing Table ↑

RIPE Database ↑

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



NetSense

Find out information about your *AS or Prefix*

3333

Sense

AS3333 - RIPE-NCC RIPE Network ...

Prefix ▾	First Seen ↑	Last Update ↑
193.0.0.0/21	20 Mar 2009	5 hours ago
193.0.12.0/23	20 Mar 2009	5 hours ago
193.0.18.0/23	20 Mar 2009	5 hours ago
193.0.20.0/23	20 Mar 2009	6 hours ago
2001:610:240::/42	20 Mar 2009	2 hours ago

Visibility of 193.0.12.0/23

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Routing Consistency

- Don't Filter All inconsistencies
 Routing table Database
 Only consistencies

Origin Prefixes ▾

Import Peers

Export Peers

BGP Routing Table ↑

RIPE Database ↑

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



Feedback

- Within NetSense
 - <http://netsense.ripe.net>
- By email
 - netsense@ripe.net
- RIPE Labs forums:
 - <http://labs.ripe.net/node/66>

- Talk to me!

PROTOTYPE

Questions?

