



Routing Information Service Status and Plans

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RIPE NCC

RIPE 48, Amsterdam, May 2004



Overview

- **Administrativa**
- RIS Web Access
- Remote Route Collectors
- RIS Developments
- Ongoing Projects
- Epilogue

Staff

- Alexis Yushin with us temporarily as a contractor
- Took over from where Maximo Alves, who decided to return to Brazil last year, left the myASn prototype
- Currently coding myASn β





Some Changes at New Projects

- Old Situation:
 - New Projects became involved in running the data collection infrastructure and maintaining the software
 - Claimed time and resources from the intended tasks
- New Situation after the Summer:
 - Operations and Software departments will assume responsibilities where appropriate
 - New Projects will focus on:
 - Analysis of Data
 - New Services
 - Prototyping
 - Collaborations with the Research Community

Time Schedule

1. Preparations: Ongoing
2. O/S Upgrade RRC
 - Internal work: 10/5 - 31/5
 - Distribute CD's, remote upgrades: 1/6 - 21/6
3. Integrate Hardware into OPS Maintenance Scheme: 1/6 - 21/6
4. Helpdesk Handover to SED
 - Training: 10/5 - 16/6
 - Peering requests by SED helpdesk +/- 18/5
 - Other requests by SED helpdesk +/- 16/6
5. Software Handover 16/6 - 15/7

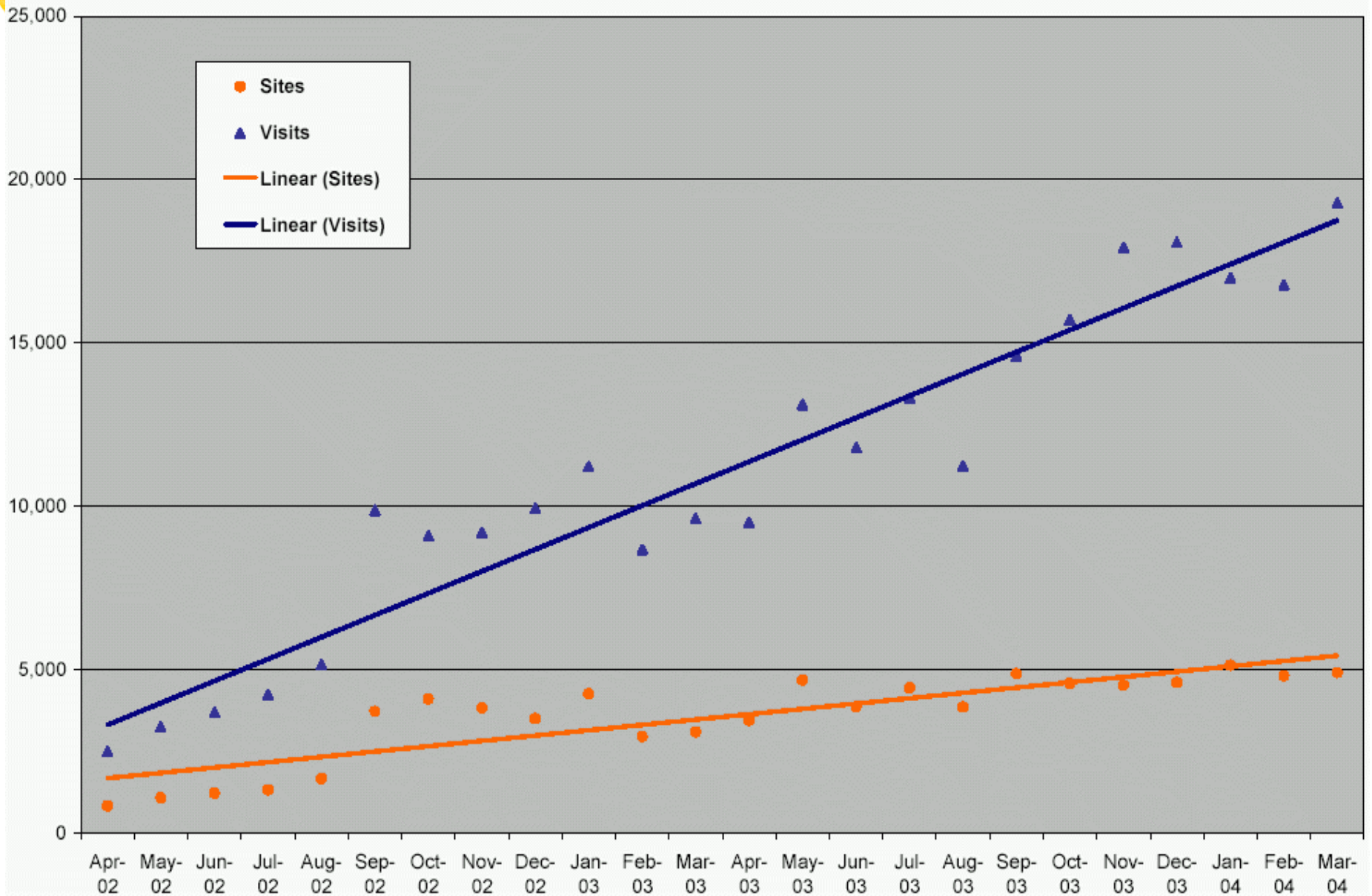
- **Contact email addresses will naturally remain the same 😊**



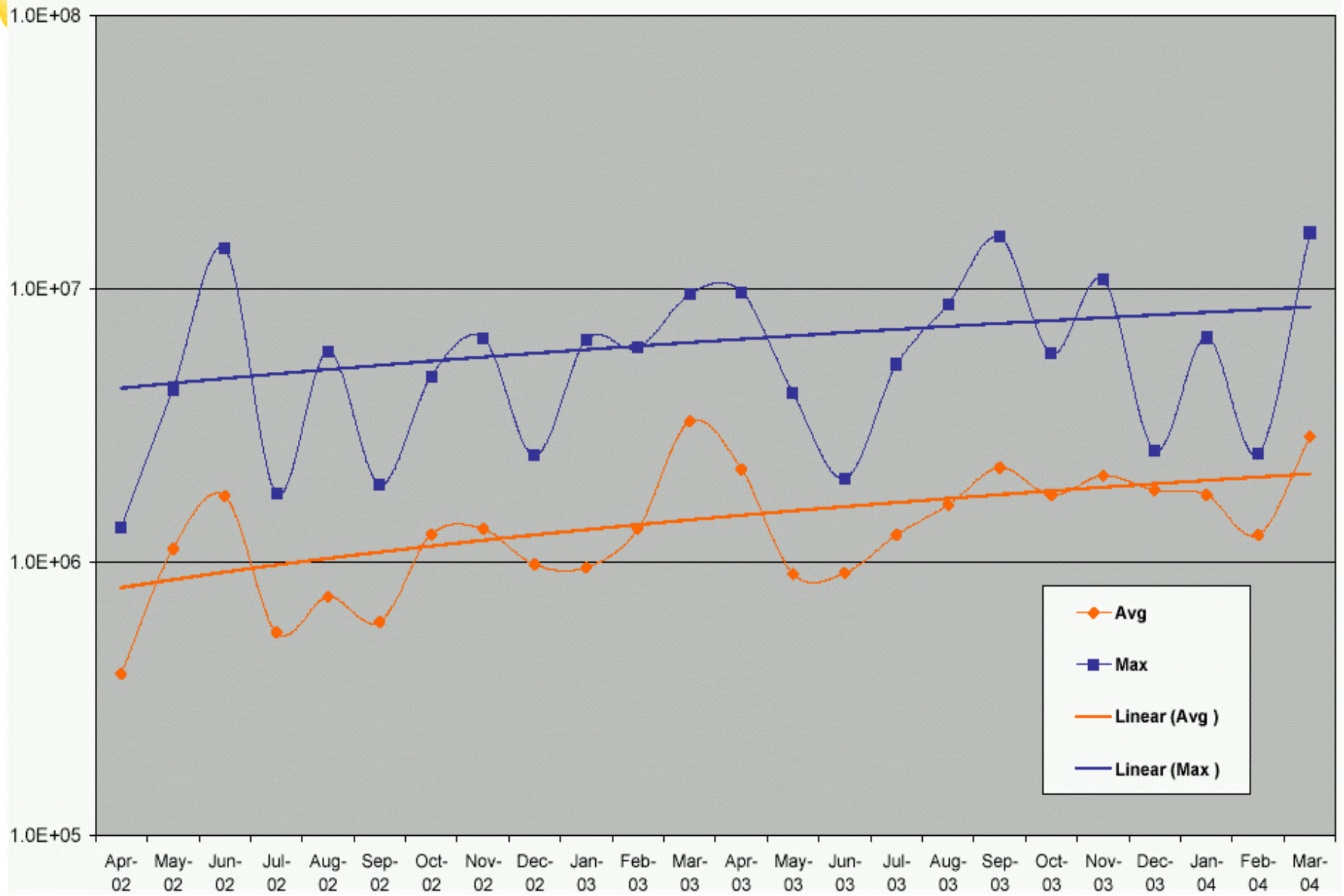
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Sites and Visits per Month for RIS Web Sites (aggregate values)



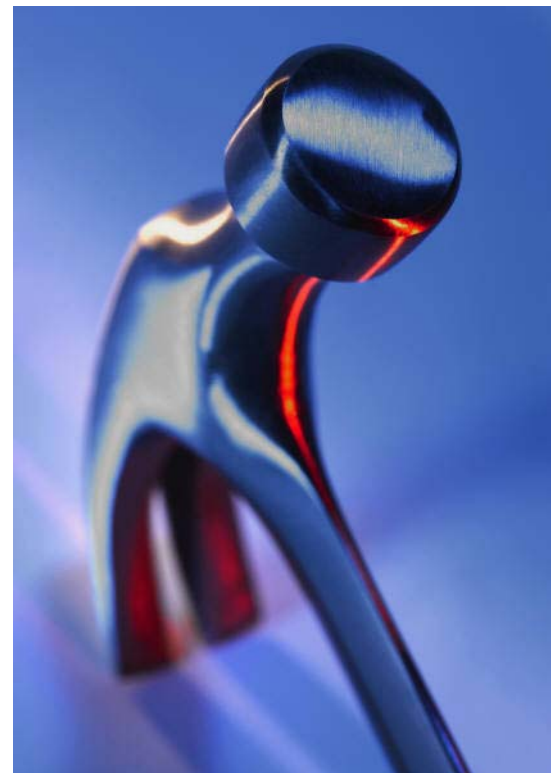
Kbytes per Day for RIS Raw Data Site



Web Statistics (cont.)

Most Popular RIS Utilities (March, 2004)

1. RIS Looking Glass
2. ASinuse
3. Prefix Query



1,2 & 3 represented ~80% of RIS Portal's hits



Overview

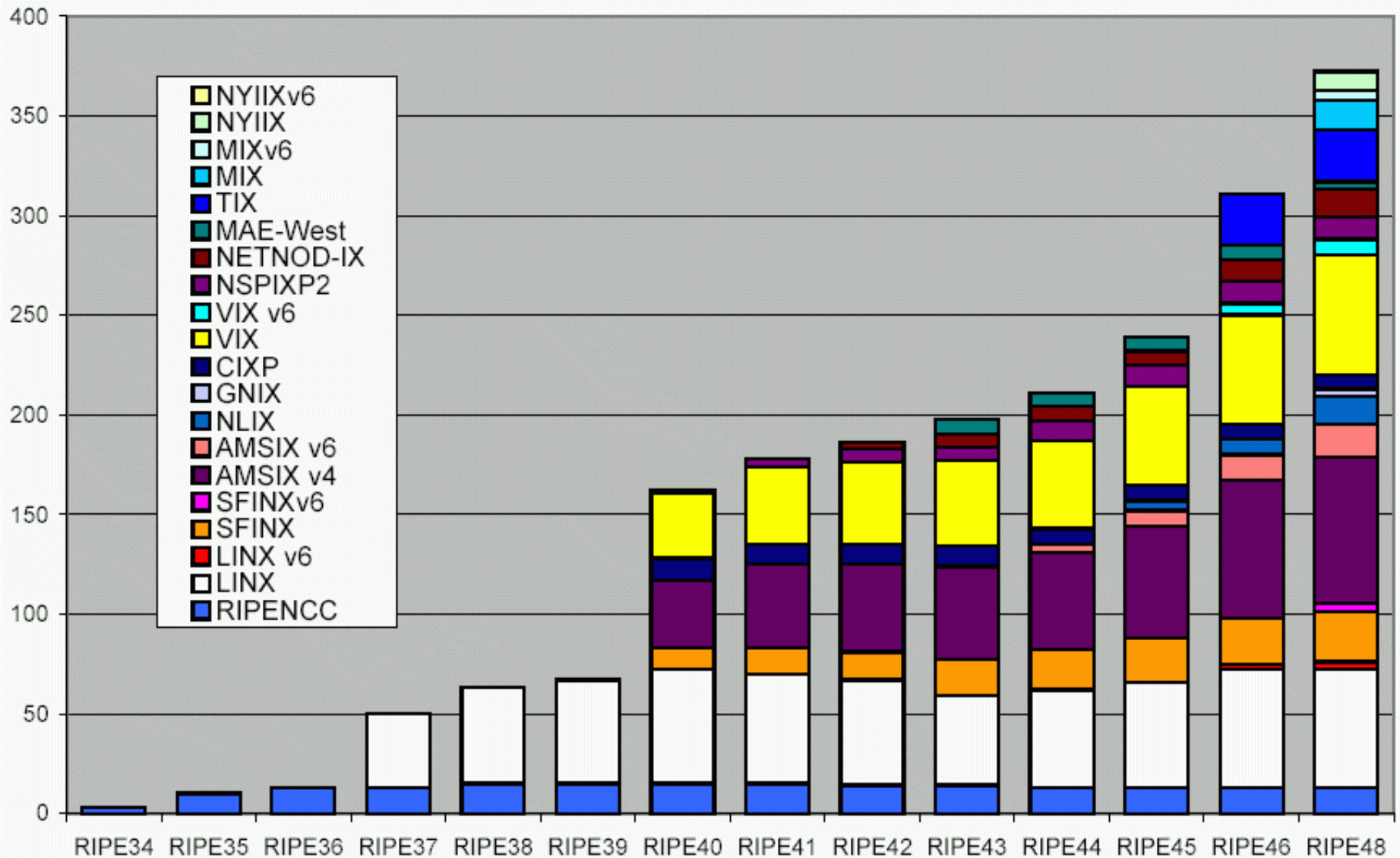
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Remote Route Collectors

- Changes Since RIPE 46
 - Peering presence at **three** more IXPs:
 - GN-IX (Additional NIC in RRC03)
 - MIX (RRC10)
 - NYIIX (RRC11)
 - MD5 Support (RFC 2385) on some RRCs, not RRC01, RRC02, RRC06, and RRC10
 - Deadline 14.05.2004
 - Hardware problems lately on RRC02 (SFINX) and RRC10 (MIX)
 - RRC02: Old, dead & out of warranty, so new HW shipped to SFINX
 - RRC10: Fixed within days by exchanging the motherboard with the assistance of responsive MIX staff
- ***New RRC planned for DE-CIX in Frankfurt***

Peering Sessions over Time



Total: 373 (+62)



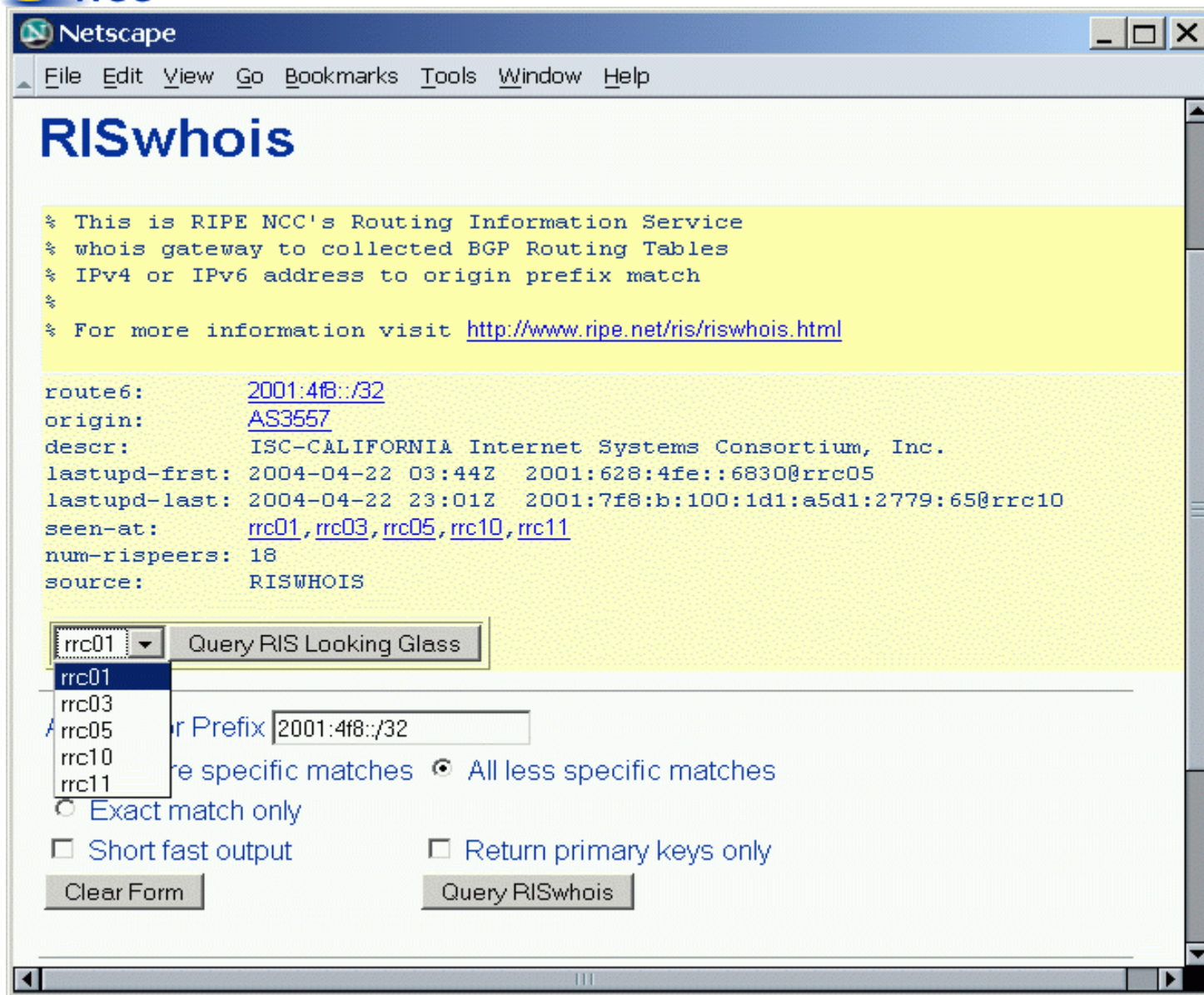
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RIS Developments

- Finally RISv6
 - Collection of raw data, Nov 2002
 - RISng (IPv6 support) in production, July 2003
 - RIS dBase insertion, April 2004
 - IPv6 CGI queries, May 2004
- ‘libbgpdump’ v 1.4
 - Collaboration with Agilent
 - Used by the RIS dBase insertion process
 - Some features:
 - IPv6 support
 - Better handling of corrupt raw data than route_btoa
 - Tarball includes ‘bgpdump’ - drop-in replacement for route_btoa
 - <http://www.ris.ripe.net/source/> (available by CVS mid-May)



RISwhois

% This is RIPE NCC's Routing Information Service
 % whois gateway to collected BGP Routing Tables
 % IPv4 or IPv6 address to origin prefix match
 %
 % For more information visit <http://www.ripe.net/ris/riswhois.html>

```

route6:      2001:4f8::/32
origin:      AS3557
descr:       ISC-CALIFORNIA Internet Systems Consortium, Inc.
lastupd-frst: 2004-04-22 03:44Z 2001:628:4fe::6830@rrc05
lastupd-last: 2004-04-22 23:01Z 2001:7f8:b:100:1d1:a5d1:2779:65@rrc10
seen-at:     rrc01, rrc03, rrc05, rrc10, rrc11
num-rispeers: 18
source:      RISWHOIS
    
```

Query RIS Looking Glass

 Prefix
 more specific matches All less specific matches

 Exact match only
 Short fast output Return primary keys only

- Tighter integration with RIS Looking Glass and the Prefix query

MOAS Report for IPv4/IPv6

Netscape

File Edit View Go Bookmarks Tools Window Help

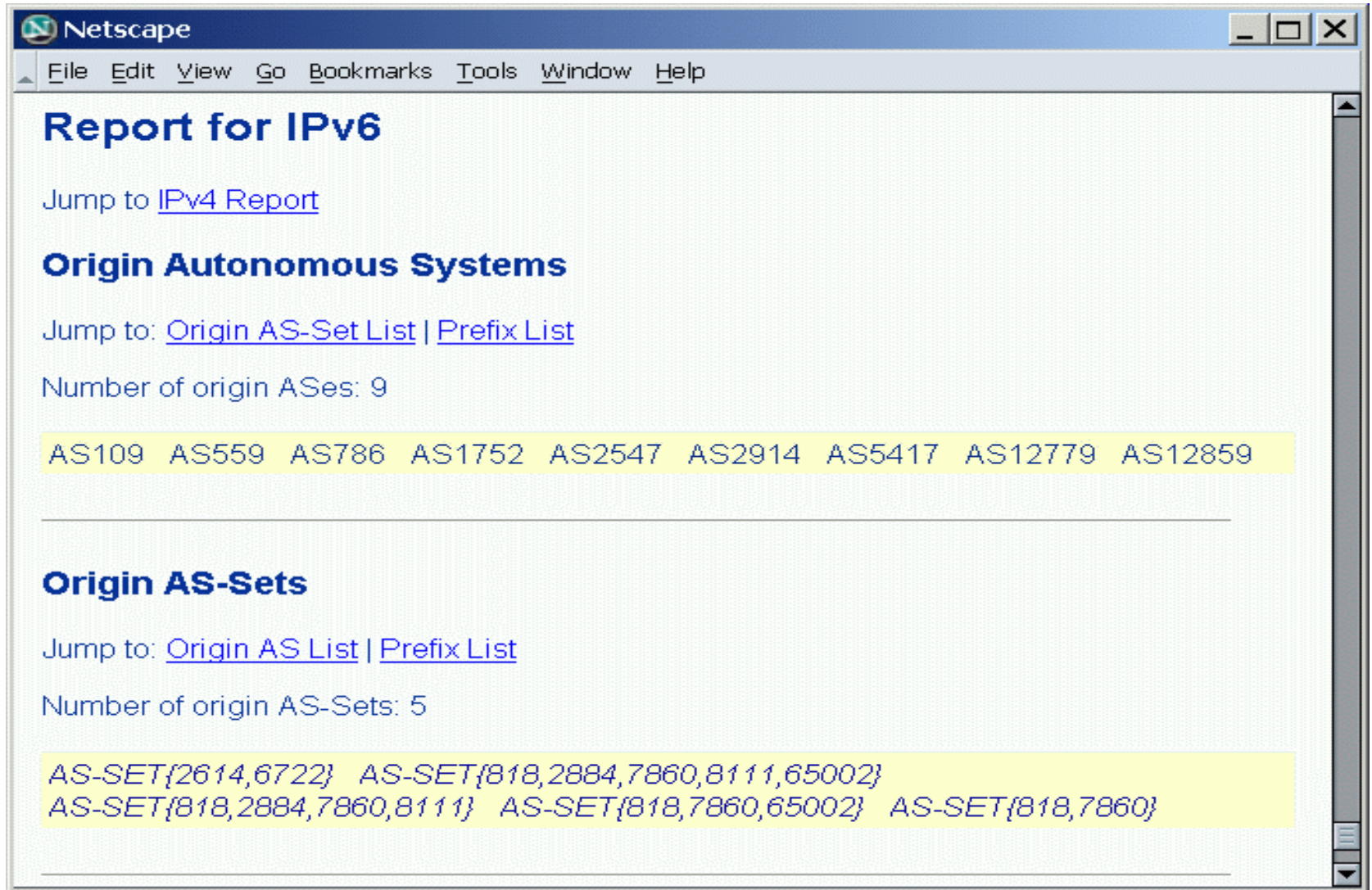
Prefixes

Jump to: [Origin AS List](#) | [Origin AS-Set List](#)

Number of prefixes originated from multiple autonomous systems: 5

Prefix	Origin ASes/AS-Sets	Queries	
2001:410::/35	AS-SET{818,7860,65002} AS-SET{818,7860}	RIPE Database	RISwhois
2001:410::/32	AS-SET{818,2884,7860,8111,65002} AS-SET{818,2884,7860,8111}	RIPE Database	RISwhois
2001:7f8:1::/64	AS2914 AS5417	RIPE Database	RISwhois
2002::/16	AS1752 AS559 AS786 AS12859 AS109 AS12779	RIPE Database	RISwhois
3ffe:2f00::/24	AS-SET{2614,6722} AS2547	RIPE Database	RISwhois

MOAS Report (cont)



Netscape

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Report for IPv6

Jump to [IPv4 Report](#)

Origin Autonomous Systems

Jump to: [Origin AS-Set List](#) | [Prefix List](#)

Number of origin ASes: 9

AS109 AS559 AS786 AS1752 AS2547 AS2914 AS5417 AS12779 AS12859

Origin AS-Sets

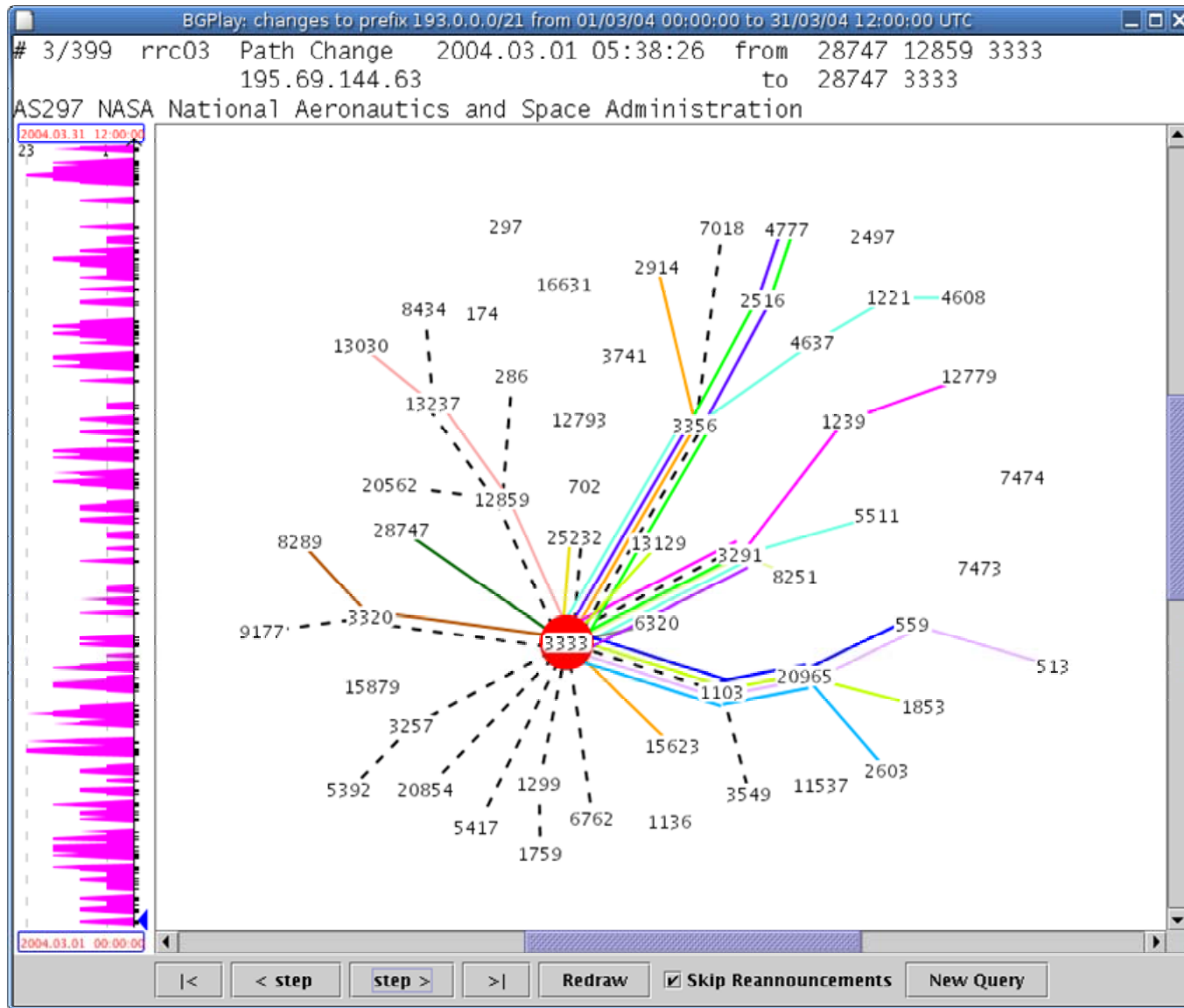
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Number of origin AS-Sets: 5

AS-SET{2614,6722} AS-SET{818,2884,7860,8111,65002}
AS-SET{818,2884,7860,8111} AS-SET{818,7860,65002} AS-SET{818,7860}

- <http://www.ripe.net/ris/query.html#stats>

BGPlay



- Path visualisation tool hosted by RIPE NCC
- Developed by the Computer Networks Research Group at Roma Tre University
- Quick demo after this talk by Lorenzo Colitti



Debogonising New Address Blocks

- Announcing /16 and /21 pilot prefixes from new IPv4 /8s allocated by IANA to RIPE NCC
- Help operators to update their Bogon filters accordingly before RIPE NCC starts making its allocations to LIRs
- Demonstrates the value of having the RIS
 - Prefixes injected into global routing table using RRC03
 - Monitoring of prefix visibility by querying the RIS dBase





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Status of RISv6

- More IXPs...
 - IPv6 peerings now at SFINX, MIX and NYIIX, previously only LINX, VIX and AMS-IX
 - **38 Sessions** altogether (+16 since RIPE 46)
- RIS Looking Glasses support IPv6
- Raw data, dBase insertion, and finally getting there with CGIs

- URLs for IPv6 Queries
 - TBA on ris-users@ripe.net in May

Status of myASn

- Rewrite of the myASn prototype (not doing AS path matching as expected)
- myASn β nearly ready for testing
 - All RRCs processed (myASn prototype: only rrc03)
 - myASn integrated into LIR portal 'look and feel'
 - Prototype users will be migrated to the beta system
- Adapting old documentation to suite the new version

- Around **200 myASn accounts** created on the prototype (Thank you! 😊)
- Test users are added to the myASn mailing list:
myasntesting@ripe.net



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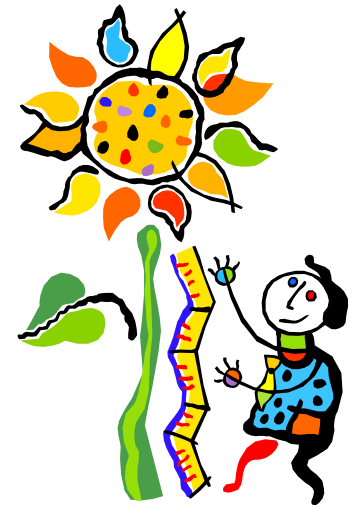
Summary

- Remote Route Collectors
 - 12 active collectors on three continents
 - More than 370 IPv4 and IPv6 peering sessions
- RIS Developments
 - RISv6
 - dBase insertion and beta queries
 - 'libbgpdump'
 - IPv6 support
 - RISwhois Web Interface
 - Nice integration with other RIS features
 - MOAS report
- Projects
 - RISv6
 - Extending IPv6 to more RRCs, currently 38 peerings at six IXPs
 - myASn
 - β nearly ready, see demo



Next Steps

- Move RIS operations and software maintenance out of NP, then study other applications of the data for the community
- Make CGI queries IPv6-compatible
- Patch RRCs for MD5 support
- Deploy collector at DE-CIX, fix RRC02 at SFINX
- Continue work aimed at turning myASn into a RIS service integrated into the LIR portal



RIS demo

- Test-drive the RIS
- Expert help available during coffee breaks on Wednesday and Thursday
- Feedback please 😊
- Comments: ris@ripe.net
- Peerings: rispeering@ripe.net
- Mailing list: ris-users@ripe.net
- URL: <http://www.ripe.net/ris>



Questions, Discussion

