



Routing Information Service Status and Plans

Matthew Williams
Customer Liaison Engineer

RIPE NCC
RIPE 49, Manchester, Sept 2004



RIS? The Short Version

- A historical view of the Internet from a number of different vantage points
 - Route collectors (RRC) at IXPs peer with as many ASes as possible using eBGP
 - The BGP data is collected and stored at a central point
 - RIPE NCC provides public access to RIS data
 - Raw data files
 - Query interfaces (ASinuse, RISWhois, BGPplay, etc.)
- Read more about it !

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



Overview

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

Staff

- Alexis Yushin, who was with us temporarily as a contractor, has finished his undertaking: myASn v.1
- Engineering transition within RIPE NCC
 - Arife Vural moved from NP to SED
 - James Aldridge from NP to OPS
 - Vasco Asturiano hired by SED as User Support Specialist





Recap: Why the transition?

- 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 (OPS) and Software (SED) departments will assume responsibilities where appropriate
 - New Projects will focus on:
 - Analysis of Data
 - New Services
 - Prototyping
 - Collaborations with the Research Community



Overview

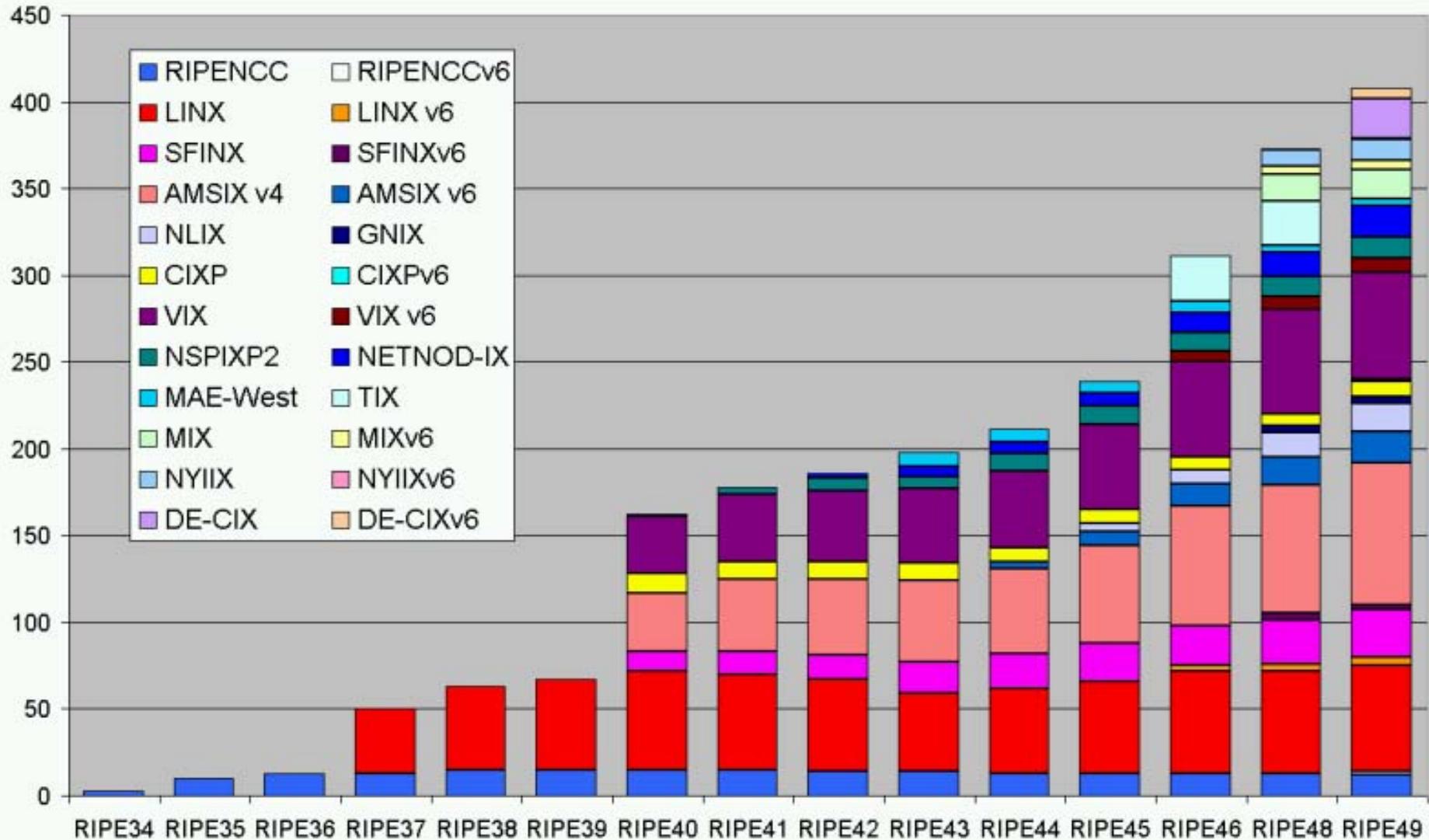
- Administrativa
- Remote Route Collectors
- RIS Developments
- Ongoing Projects
- Epilogue



Remote Route Collectors

- Changes since RIPE 48:
 - New HW shipped to SFINX/Paris (RRC02) and MIX/Milan (RRC10)
 - RRC07 in Stockholm connected to NETNOD's GigE peering LAN
 - RRC09 at TIX/ Zurich decommissioned;
Netlantis decided to abandon MRT format
 - RRC12 deployed in Frankfurt (DE-CIX)
 - *All RRCs patched for MD5 Support (RFC 2385)*
- Collector at Mae-West/San José will move to PAIX/Palo Alto
- Another RRC underway in Moscow at the MSK-IX
- Possibly one more deployment in the Mid-East
 - *RIS coverage of the Internet probably satisfactory*
 - *Based on a hunch, needs to be quantified*

Peering Sessions over Time



Total: 408 (+35)



Overview

- Administrativa
- Remote Route Collectors
- RIS Developments
- Ongoing Projects
- Epilogue

RIS Developments

- Transition to SED/OPS
 - **100% done**
 - No difference for the outside world, except ris@ripe.net and rispeering@ripe.net now ticketised
- Debogonising effort continued...
 - <Impact of 85/8 pilot prefixes - check with JHMA>
 - Daily reports published on our web site
 - <http://www.ris.ripe.net/debogon/index.html>
 - Reachability Tool
 - <http://www.ris.ripe.net/cgi-bin/debogon.cgi>
- Public RIPE NCC CVS server with RIS software
 - Requested by users
 - URI will be posted on the RIS & TTM mailing lists

myASn v.1.0

A screenshot of a Netscape browser window displaying the myASn web interface. The window title is "my ASn - matthew - Netscape". The interface includes a navigation menu (File, Edit, View, Go, Bookmarks, Tools, Window, Help) and a blue header bar with the text "my ASn" and "You are logged in as [matthew] and you are editing 55555". Below the header, there is a "myASn" link, a welcome message for "matthew", and information about active and new alarms. A list of links is provided for user actions, including "Create new alarm", "Manage alarms", "Manage alarm groups", "View alarms", "Import from alpha", "Import & Export XML", "Help & FAQ", "Feedback to the RIS team", "Post to the mailing list", "Requested features", "Known Bugs", and "Acknowledgments". At the bottom, there are links for "RIS Tools" (BGPlay, RIS Whois, Martian report, Looking Glass, Status of RRC's, More) and a footer with "RIS Main Page | Feedback | Bug Reports | About RIPE NCC | RIPE Community | About RIPE" and "copyright RIPE NCC. All rights reserved."

- Alarm system for eBGP
- Apply for your own account!
- Demo:
Wednesday
1330-1830

- <http://www.ris.ripe.net/myasn.html>



Overview

- Administrativa
- Remote Route Collectors
- RIS Developments
- Ongoing Projects
- Epilogue

Status of RISv6

- IPv6 peering presence at more IXPs...
 - Besides the new RRC at DE-CIX/Frankfurt, started IPv6 collection at SFINX/Paris and CIXP/Geneva
 - **49 Sessions** altogether (+11 since RIPE 48)
- The Good,
 - Some RIS tools already support IPv6
 - RIS Looking Glass
 - RISwhois
 - BGPlay
- ...Bad...
 - We promised to finalise the IPv6 CGI's by R49, but didn't make it
 - End of November, 2004, our new ETA
- & Ugly
 - Prototypes
 - IPv6 prefix query: <http://www.ris.ripe.net/cgi-bin/ipv6/prefixquery.cgi>
 - IPv6 BGP updates: <http://www.ris.ripe.net/ipv6-updates/>

Status of myASn

- myASn v. 1
 - Handover from NP to SED done
 - Monitor hardware performance
 - Integrate it into the LIR-portal
- myASn v. 1++ & 2
 - Tighter IRR integration; e.g. importing of a default or baseline myASn configuration from the IRR
 - “Visibility type alarms”; e.g. visibility monitoring of specified prefix and path
 - “Churn based alarms” - detection of excessive duplicate announcements, flaps etc
 - “Global alarms” - martians, default route detection
 - “Retromatch” - myASn in the past



NP's Focus in the IDR Area

- NP will investigate myASn major feature requests from users
 - There's a long list linked from the myASn main page
- Secure Routing
 - Technologies are getting more mature
 - RIPE NCC will study them and the role that has to be played by the RIR's in deploying them.
 - Proposal early 2005 for discussion
 - Two sites already showed interest to work with us on testing and early deployment.
- Collaboration with the Technical University of Munich (TUM)
 - Good research that could be integrated into RIPE NCC services
 - Olaf Maennel will explain more in his talk later on
- Please contact us if you have ideas ;)
 - Talk to Henk and/or myself here at RIPE 49
 - Email: ris@ripe.net



Overview

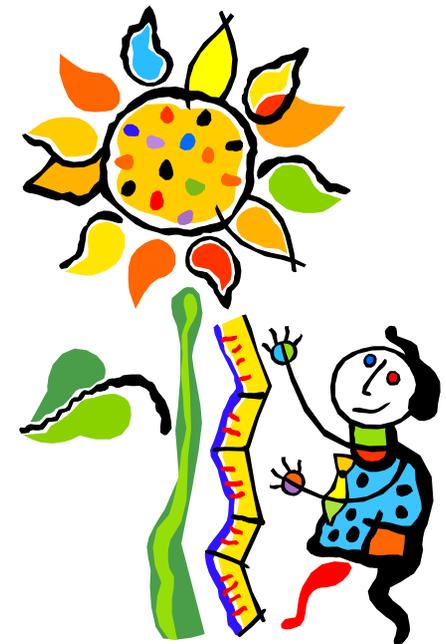
- Administrativa
- Remote Route Collectors
- RIS Developments
- Ongoing Projects
- Epilogue

Summary

- Remote Route Collectors
 - RRC12 deployed at DE-CIX, RRC09 decommissioned
 - 12 active collectors on three continents
 - More than 400 IPv4 and IPv6 peering sessions
- RIS Developments
 - Transition to SED/OPS done
 - Public CVS server in place
 - Debogonising effort continued
- Projects
 - RISv6
 - Currently 49 peerings at eight IXPs
 - Some RIS Tools support IPv6, more needs to be done by Nov
 - myASn
 - v. 1 ready as a RIPE NCC service
 - Handed over to SED
 - NP will look beyond v. 1

Next Steps

- myASn
 - Monitor myASn v. 1 performance
 - Integrate into LIR-portal
 - Look into myASn 1++ and 2
- RISv6
 - Continue work on CGIs
- RRCs
 - Move to PAIX
 - Deploy collector at MSK-IX
- R&D
 - Continue TUM collaboration
 - Secure routing
 - Investigate what NP could do there



RIS demos at RIPE 49

- Test-drive the RIS
 - Expert help available during early coffee breaks on Tuesday and Thursday
- myASn v 1.0
 - Demo: Wednesday 1330-1830
 - Ask for your own account
 - Comments: ris@ripe.net
 - Peering requests: rispeering@ripe.net
 - Mailing list: ris-users@ripe.net
 - URL: <http://www.ripe.net/ris>
- Feedback please 😊

Questions, Discussion

