Report on the 2nd Inter-Domain Routing Workshop

IDRWS 2004

http://www.tm.uka.de/idrws/

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What was the intension for this Workshop

- It was **not** “Yet another workshop about …”
- Create a European platform for Inter-Domain issues
- Bringing together
  - Academics
  - Operators
  - Vendors

  with the intension is to discuss every talk from their perspective
- Difference to EOF
  - Focus is on Inter-Domain Routing only
  - Duration of topics is seen as “longer term” issues

What is the workshop about

- Everything in the context of Inter-Domain is related to this workshop
- Outline of only some possible topics
  - Measurement
  - Alternative ideas
  - Future of routing
  - Registry
  - Next Generation Networks
  - Tools
  - Operational Challenges/Issues
  - Dangers
- Discussion Discussion Discussion Discussion
  - The amount of attendees is kept small (max 20)
- **!!! Workshop is open to everyone !!!**

Our *long* history ;-)

schlundpartner

- First IDRWS 2003 (http://www.tm.uka.de/idrws/2003/) Talks about
  - *Towards an Improvement of BGP Failure Handling*
  - *Explicit Routing Concepts*
  - *Observed properties of BGP convergence*
  - *Routing-Convergence from RFC2547bis-VPNs*
  - *Policy based Calculation of the Internet Topology*
  - *IGB - full mess^Hh*

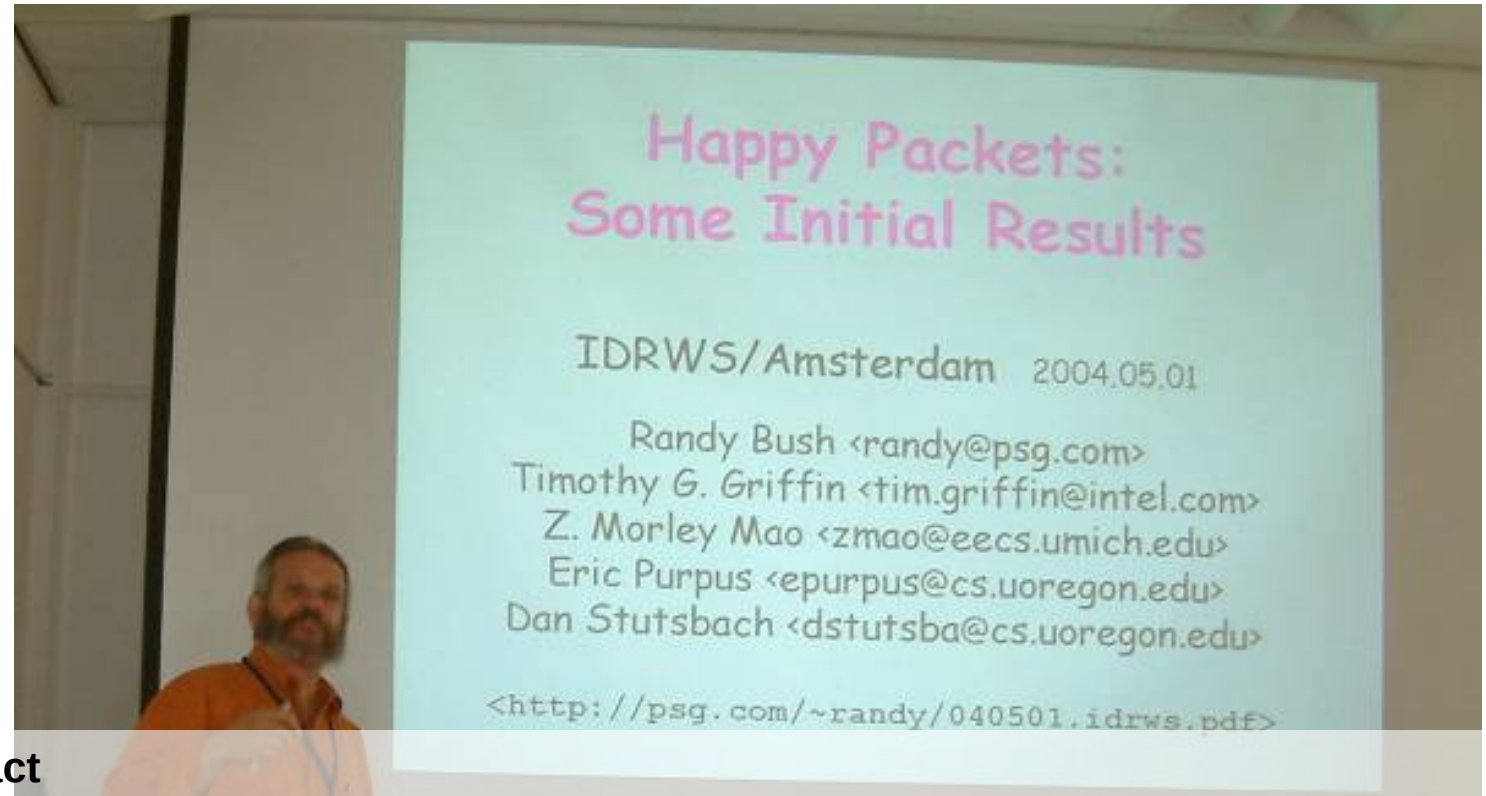
- Second IDRWS 2004 (http://www.tm.uka.de/idrws/2004/) Talks about
  - See yourself …

Ripe NCC

Program for 1st of May

Future of Routing	Randy Bush "*Happy Packets - Initial Results*"
	Simon Leinen "*Arguments for path selection by end-systems and outline of a pure source-routing approach*"
	Rüdiger Volk "*Considering application fit for standard requirements of iBGP*"
Internet Routing Registry	Geoff Huston "*Allocations and Advertisements*"
	Larry Blunk "*Towards a Cohesive Internet Routing Registry System*"
	Georgos Siganos "*Nemecis: A tool to analyze the IRR registries*"
Alternatives	kc Claffy (p.p. Dimitri Krioukov) "*Introduction to compact routing*"
	Christoph Reichert "*IP-Protection for Fast Inter-Domain Resilience*"
	Götz Lichtwald "*Stabilizing the BGP control plane*"
Next Generation Networks	Karl Schrodi "*Inter-Domain Routing Issues in Next Generation Networks*"
	Thomas Engel "*Inter-domain Resilience for QoS Traffic*"
	Thomas Schwabe "*Independence of Inter-Domain QoS Signaling and Routing*"

Happy Packets …

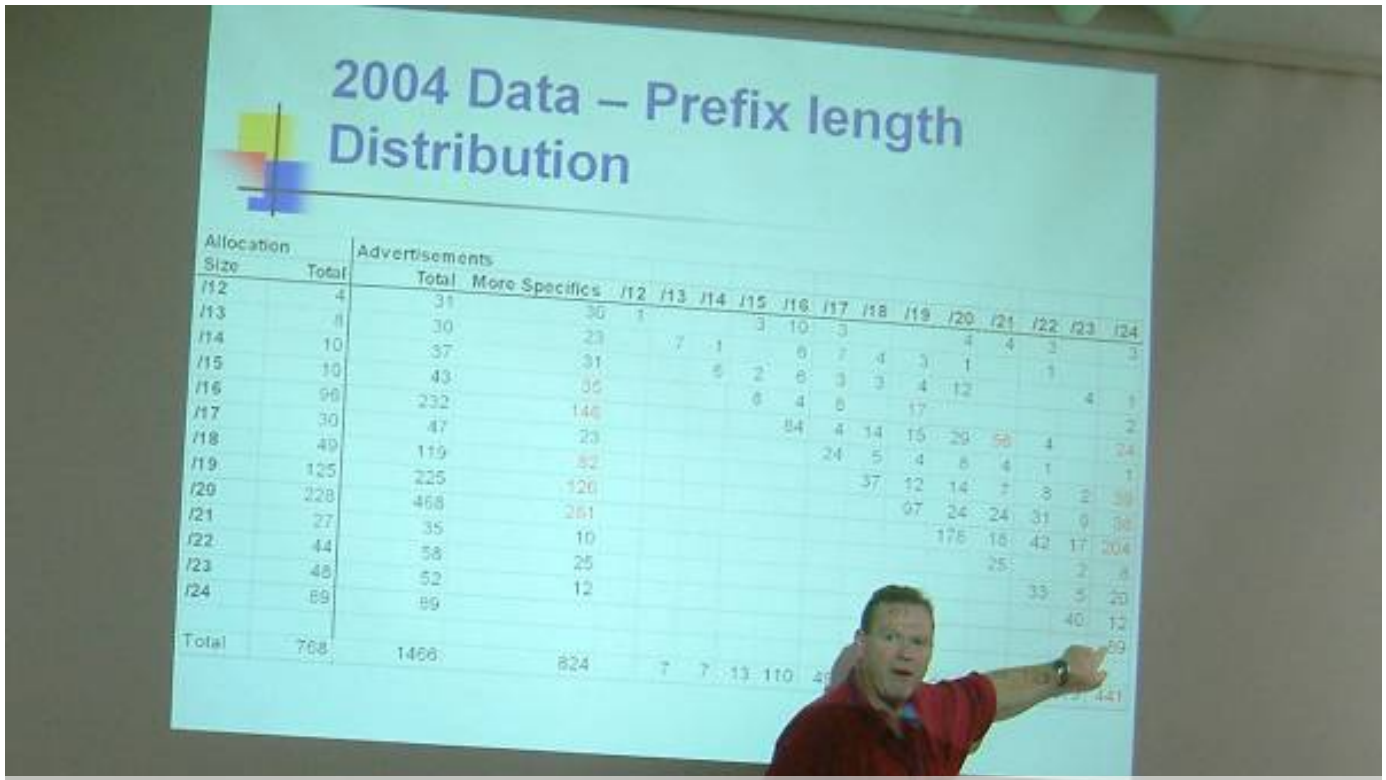


Abstract

As routing researchers, we frequently hear comments such as o internet routing is fragile, collapsing, ..., o bgp is broken or is not working well, o yesterday was a bad routing day on the internet, o change X to protocol Y will improve routing, o etc.

And we often measure routing dynamics and say that some measurement is better or worse than another. But what is 'good' routing? How can we say one measurement shows routing is better than another unless we have metrics for routing quality?

Allocations and Advertisements



Abstract

This presentation analyses available data to compare the history of address allocations and the manner in which these allocations are advertised - specifically the extent to which fragmentation of an allocation into multiple advertisements.

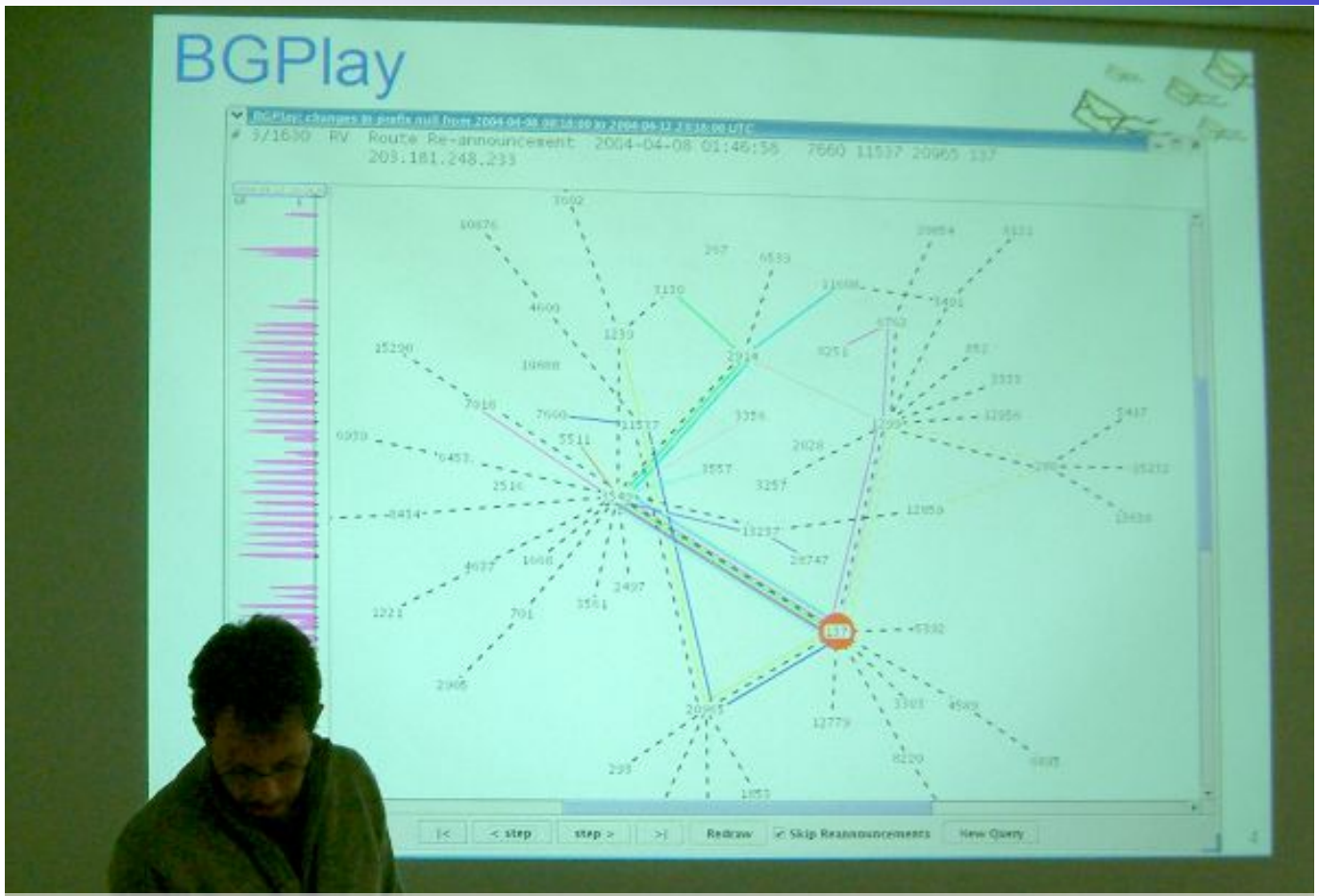
Trends in behaviour of fragmentation are derived, and some conclusions are drawn on a possible relationship between allocation policies and BGP routing advertisements in terms of the level of fragmentation of allocations in BGP advertisements.

Social – continuing discussions

Program for 2nd of May

Operational Issues	Stefan Mink "*Detecting unwanted route readvertisements*"
	Volodymyr Yakovenko "*Some aspects of more specific prefixes routing*"
	Simon Leinen "*Living with partial routing*"
Tools	Kihong Park "*Steps Toward Large-scale Meaningful BGP Simulation*"
	Olivier Marcé "*Embedded routing monitoring: prototype and results*"
	Maurizio Pizzonia "*Visual Analysis of Inter-Domain Routing Dynamics*"
Operational Challenges	Bruno Quoitin "*Cooperative Incoming Traffic Engineering*"
	Steve Uhlig "*Towards a more systematic approach for interdomain traffic engineering*"
	Cristel Pelsser "*MPLS Traffic Engineering across AS boundaries*"
Dangers / Outlook	Timothy Griffin "*BGP Wedgies --- Bad Routing Policy Interactions that Cannot be Debugged*"
Panel Discussion	Chair: T. Griffin "*Internet and IDR - ten years from now*"

BGPlay



Abstract

BGP conversations recorded by route collectors provide and impressing source of information for Internet Service Providers. There is a pressing need for new methodologies and tools to visually analyze this huge amount of data in order to monitor inter-domain routing dynamics and instabilities.

BGP Wedgies …

Abstract

It is now common knowledge that locally well defined BGP routing policies can interact to produce unexpected routing anomalies globally. We introduce a new class of such problems, called BGP Wedgies.

A BGP Wedgie is defined as a policy interaction where …

Was it really a workshop

Why should YOU attend?

Take this workshop as place for

- pointing to problems you have
- pointing to interesting areas
- pointing to effects that are hard to explain (➔ BGP wedgies)
- Use it for getting in touch with researchers willing to look at your problems

Next one? – YES!

- Almost 100% are looking forward to the next IDRWS
- 85% did attend the first time
- The overall ranking was very positive
- ➔ Yes there will be another IDRWS
  - Right now we do not know the exact date and place
  - DO visit your website
    http://www.tm.uka.de/idrws/
    and drop your email address (you receive ONE notification via email, no spam)
- We are looking forward to your contribution

Where you find us

- http://www.tm.uka.de/idrws/
  - Drop your email address
- Mail to
  - idrws@ripe.net
  - Idrws-submission@tm.uka.de
  - lichtwald@tm.uka.de
- Talk to me – I will be around until the end of this week
- Google us using "**idrws 2004**"