NETLANTIS @ FRnOG-5

Speaker:

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What is NETLANTIS?

Netlantis is an open research project for **realtime** analysis and representation of BGP routing tables ...
How does it work?

ISPs

Route Collectors

Database & User Interface

End Users

BGP

RSYNC

HTTP/ TELNET/ WHOIS/ ...

Netlantis
...where all the routes meet.

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The tools

- **Graphical tools**
  - GASP (Graphical AS Paths)
  - AS MATRIX (graphical representation of AS PATHS, using ‘graphviz’)
  - ...

- **Analysis tools**
  - Check your AS
  - Bogus ASN in paths
  - Bogus prefixes
  - Different Graphs (IPv4 usage / prefix counter / …)
  - ...

- **Miscellaneous tools**
  - Telnet and whois query tool
  - Cisco IP Phone XML interface
  - ...

- **Future tools**
  - Neteo
  - BGPmon
  - RootzMap
  - Java AS MATRIX
  - (your tools?)
  - …
Graphical AS Path for 62.204.96.0/19
This network is announced by AS15600.

Hold your mouse over the flag to get more details about a particular AS.
The AS MATRIX tool
AS CHECKER RESULTS FOR AS15600

AS NAME : LAN-SERVICES
MAINTAINER : CH-LAN-MNT
DESCRIPTION : LAN Services AG Autonomous System
SOURCE : RIPE

PREFIXES ANNOUNCED BY AS15600
62.204.96.0/19  193.218.104.0/24 194.158.233.0/24 194.230.57.0/24
194.230.79.32/27  195.65.76.0/24  195.65.77.0/24  195.65.78.0/24
212.60.32.0/19  213.142.160.0/19  213.213.160.0/19  213.221.192.0/18

neighbor AS513 (192.65.184.3 ) : Some as paths are different
62.204.96.0/19 updated at 01-09-2003 05:13:22 path: 513 6730 15600
193.218.104.0/24 updated at 01-09-2003 05:13:28 path: 513 6730 15600
194.158.233.0/24 updated at 01-09-2003 05:13:31 path: 513 3320 3549 15600
194.230.57.0/24 updated at 01-09-2003 05:13:30 path: 513 12350 15600
195.65.76.0/24 updated at 01-09-2003 05:13:30 path: 513 12350 15600
195.65.77.0/24 updated at 01-09-2003 05:13:30 path: 513 12350 15600
195.65.78.0/24 updated at 01-09-2003 05:13:30 path: 513 12350 15600
212.60.32.0/19 updated at 01-09-2003 05:13:34 path: 513 6730 15600
213.142.160.0/19 updated at 01-09-2003 05:13:34 path: 513 6730 15600
213.213.160.0/19 updated at 01-09-2003 05:13:34 path: 513 6730 15600
213.221.192.0/18 updated at 01-09-2003 05:13:34 path: 513 6730 15600

WARNING this neighbor does NOT have 194.230.79.32/27 in its routing table!

neighbor AS559 (194.42.48.11 ) : Some as paths are different
62.204.96.0/19 updated at 30-08-2003 20:40:38 path: 559 15600
193.218.104.0/24 updated at 30-08-2003 20:40:48 path: 559 15600
194.158.233.0/24 updated at 30-08-2003 20:40:49 path: 559 3549 15600
[...]
JAS MATRIX (beta)

beta tool – http://www.netlantis.org/tglb/

Based on the open source java applid “TouchGraph Link Browser” - http://www.touchgraph.com

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Some numbers…

- over 16’000’000 prefixes in the database
- almost 150 active BGP peers
- 10 Route Collectors, USA(4), Switzerland(2), Sweden, Singapore, Germany, South Africa
The new system!

ROUTE COLLECTOR

BGP PEER

NBGPD

NBGPD - DUMP FILE (per peer, per timestamp)

RSYNC

CENTRAL SERVER

NDB - STATUS FILE

NDB

NI SAM

NDB2SQL (workaround)

MySQL - MyiSAM Tables (distributed on 10 FC disks)

MySQL Daemon
The Association

- Established in January 2004
- Legal status
- Promotion of the netlantis site
- Search for sponsors / donators
- Membership 100CHF / year (~65 EUR)
Q&A

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http://www.netlantis.org