Test Traffic Measurements
Status and Plans

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RIPE NCC New Projects Group
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Outline

- Intro

- Service contract

- Roberto's proposal for summary numbers

- New developments

- Plans and conclusion

Staff changes

- New students
  - Michael Swoboda
    - FHWN
  - Lorenzo Colitti
    - U.Rome

  - IPv6 data

Documents and reports

- Published:
  - AP2004
  - Report on MS Blaster and NYC blackout

- In the pipeline:
  - 271++ implementation document
  - Write-up of bandwidth studies

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Proposed Service Contract Changes

- Lower the service fee:
  - Effective 1/1/2004
  - € 1000/box/year for the first box
  - € 500/box/year for the second and further boxes

- All data will be made public
  - Data server with TTM data since 1999
  - General access
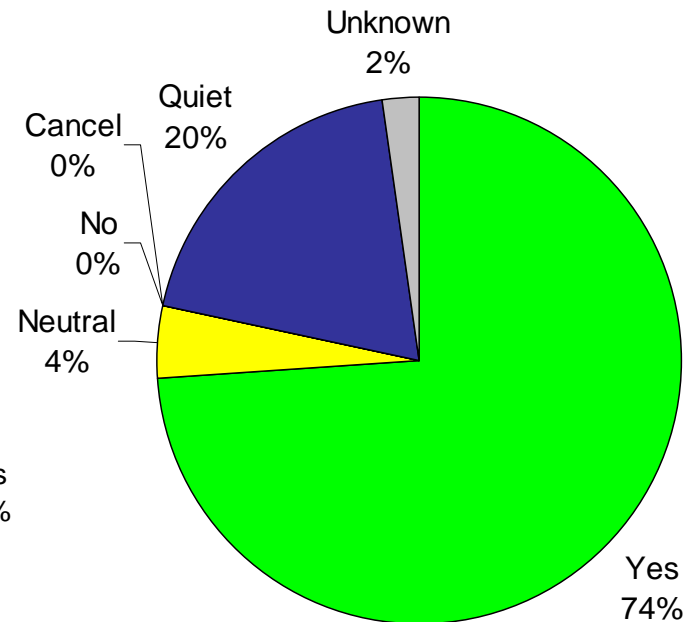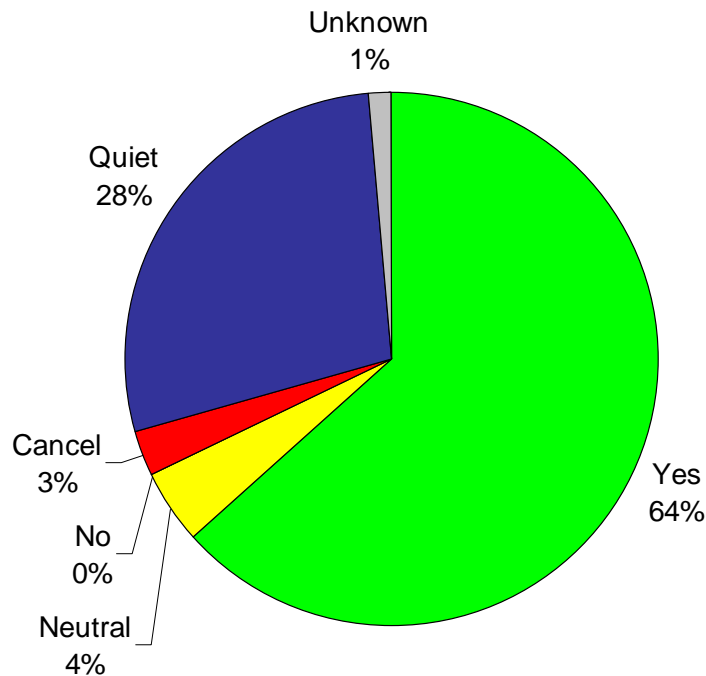 - Lightweight AUP to avoid abuse

AUP

- Will replace RIPE 179
- Lightweight AUP, goal:
  - Avoid abuse
  - As few restrictions as possible otherwise
- 4 line summary:
  - Peer review of analysis before publication
  - NCC to control distribution of data
  - Pointer to the description of the data
  - Credits and copyrights
- Time for the lawyers to come in…

Is this a good idea?
Contacted all TB hosts

All Boxes

2002 Service Fee paid

Legend: Yes | Neutral | No | Cancel | Quiet | Unknown

All Boxes pie chart:
- Unknown 1%
- Quiet 28%
- Cancel 3%
- No 0%
- Neutral 4%
- Yes 64%

2002 Service Fee paid pie chart:
- Unknown 2%
- Quiet 20%
- Cancel 0%
- No 0%
- Neutral 4%
- Yes 74%

- Clear majority in favor of change
- No bias research/non-commercial/commercial

Comments made

- We did not understand that there was a service fee and don't want to pay
  - ??

- Agree with the fee change, however the RIPE NCC must pay for hardware upgrades if they want to do IPv6 measurements (etc)
  - Hardware sponsors?

- Statistical analysis/summary
  - Next

- Unify monitoring devices:1 box for everythin

Comments

- Scaling, what happens if a provider adds hunderds of points?
    - Not a problem

- Global info OK, but don't want to hand over regional information to competitors
    - Hard, no solution

- Data used for marketing purposes is OK, but data abused for marketing purposes is not OK
    - AUP?

Proposal

- Continue changing the AUP

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Summary Numbers
(Roberto Percacci's proposal)

- 3 issues:

1. Publish a statistical summary number
   – Delay/distance

2. Limit disclosure to global summary number

3. TTM code downloadable, everybody interested downloads, RIPE NCC supervisory role

Proposal

1. A summary number is useful but we have to agree on which one?
   - Delay/Distance is a good candidate
   - Other suggestions?
   - If not, added to the to-do list
2. Don't want to restrict people too much
   - Publish result, code and raw data
3. TTM code can already be uploaded on request
   - Download fine with us too
   - Support issue

14

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  - *AS-IP*
  - *Bandwidth*   *next talks*
  - *dnsmon.ripe.net*
  - TB sales
  - v6 and kernel update
  - 2NIC
  - Documentation
  - TU Delft
- Information Services
- Plans and conclusion

TB Sales
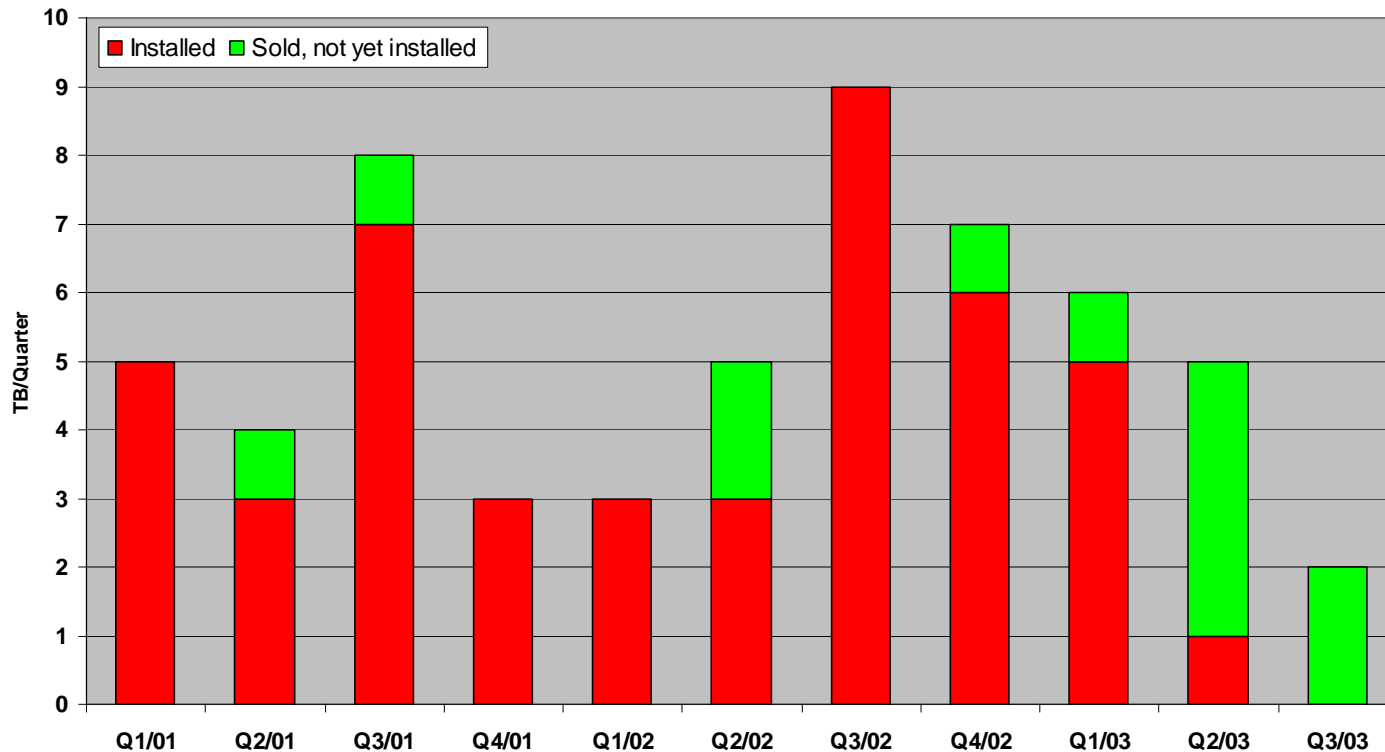
- 2 new boxes/month
- Waiting for AP2004
- Possibility of hardware sponsors

IPv6

- In production since January
- About 12 sites

- Analysis:
  - More sites, more data
  - Comparison IPv4 and IPv6
  - Tunnel detection algorithm
  - RIPE47

Kernel update

- Hardware and software versions:
  - 4 hardware versions: A, B, C, D
  - 5 software versions: 1, 2, 3, 4, 5
  - Version 5:
    - IPv6
    - Backward compatible with version 3 and 4
- Want to reduce the number of versions
  - Upgrade all series C and D boxes
  - Even if no native IPv6 at a site
  - Done 4, Scheduled 4 out of 16
- Feature freeze for version 3 and 4 on 1/10/'03

2 NIC
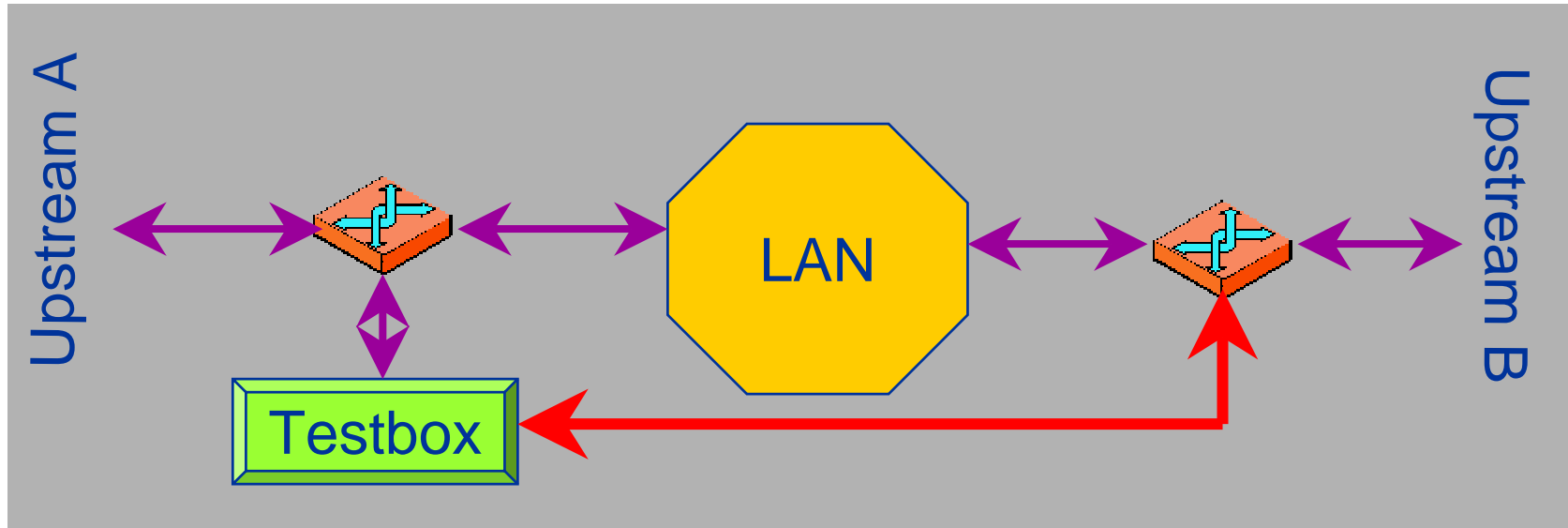
- 2 NIC's in a TB, 2 points to send data from/to
- Long time project
- Needed the v6 upgrade
- Restarted, ETA 2 months

Update of documentation

- Lots of small changes in the results section
- Documentation outdated
- Update for engineers
- Non-techy version later as part of the IS effort

Work with TU Delft

- ## 3 studies:
  - ### Understanding traceroutes
    - Clean-up of unknown addresses
    - "* * *" in your traceroute
  - ### Finding hot-spots in the network
  - ### Modeling delays
    - Paper
    - Router vendors

- ## Thinking about products

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Plans: Short term

- Infrastructure
  - Kernel upgrade
  - 2 new boxes/month
- Analysis
  - IP-AS write-up and tool
  - Bandwidth write-up
  - dnsmon.ripe.net
  - New alarm program
  - 2NIC
  - Summary numbers/Roberto's proposal
  - Delft studies
  - V6 analysis

Long term: Information Services

- Documents
  - 271++
  - AUP
- Infrastructure
  - Data server
  - Code server

Demo

Questions, Discussion