ICSI Updates: *Netalyzr*

Nicholas Weaver

International Computer Science Institute

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"Where do I donate"
-User Feedback

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Updates on Netalyzr

- The growing dataset
- IPv6 nuggets
- Netalyzr as a component in other research
- Netalyzr on Android
- Proxy Traceroute
- DNSSEC and TLS

Netalyzr's Dataset Keeps Growing

- 790,000 sessions from 530,000 IPv4 addresses
  - 180 GB of raw data...
- 20-70 new sessions in a typical hour
- We've begun doing limited data releases to researchers
  - Extract just a portion of the database that is useful to answer a researcher's questions
  - E.g. to ISI and I-root operators we provided the results of CHAOS queries to the root

Some IPv6 nuggets

- ~23K IPv4 addresses can fetch data using IPv6
  - 5.8% of sessions
- IPv6 fragmentation is ***broken***
  - ***Worse*** than IPv4
  - 37% can't send fragmented traffic
  - 37% can't receive fragmented traffic
  - 44% overall either can't send, can't receive, or can't do both

Using Netalyzr in Other Research Projects

- The command line client:
  - A (signed) .jar file
    - -q: only output the resulting URL
    - Signature allows you to download and run
- A supported ***json*** API
  - Replace “summary” with “json” in the URL
  - All uploaded information
    - Pointers to any large pieces
  - Some test results from the server side
  - Fully commented output
- A mode browser
  - -m MODE on CLI or m=MODE on the web URL
  - Allows you to fetch all results with this mode
    - If you arrange with us to provide you access

Android Version: Soon to be submitted

- Based on the full Netalyzr applet/CLI test suite
  - Currently a forked codebase for the tests itself, but will soon be reintegrated to a common codebase
  - Rendering in a web page with a different style sheet
- Currently no significant additional tests
  - We don't know what we should test for!
- Current plan is to submit to Google's app store Real Soon Now

Proxy Traceroute

DNSSEC and TLS

- Currently developing a comprehensive test suite for DNSSEC
- Client transport & client-side validation:
  - Can the client get RRSIGs and the DS for .com from the roots?
  - Can the client get RRSIGs and arbitrary records from from an arbitrary server?


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