Information Services at the RIPE NCC

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Introduction

- Data sets
- Future plans

Data sets

- TTM: http://www.ripe.net/ttm
- RIS: http://www.ripe.net/ris
- DNSMON: http://dnsmon.ripe.net
- Whois database ("RIPE DB")
- Registration data

Test Traffic Measurements

- Service to measure delay, losses and other IPPM metrics

- Dedicated machines

- One way measurements

TTM

- ## Raw data:
  - Traceroute: path information
  - Packets that were sent
  - Packets that arrived (sent minus lost)

- ## Processed data:
  - DB with traceroutes
  - ROOT files combining send, received and traceroute information

TTM Traceroute data

- mySQL DB, 2 tables (v4), 2 tables v6

- Table 1:
  - Src
  - Dst
  - Set of validity ranges and index

- Table 2
  - Index
  - Src, ip1, ip2, ip3, ... , Dst
  - AS# of all IP addresses (based on RIS)

TTM Delay/Loss data (v4/v6)

- Table:
  - Src
  - Dst
  - Send time
  - Delay (or -1 if lost)
  - Error estimates on clocks
  - Index to path

- Root format
  - Data analysis system for the LHC
  - Library and instructions available

TTM Data availability

- Restrictive AUP until 1/1/2004
- Opened up considerably since then:
  - Everybody can get a copy of the data
  - Publish anonymously
  - Present to RIPE community for comments first
    - RIPE meeting
    - Mail paper around
- 120 Gb/year
  - Currently copy by hand
  - Investigating other setup

Routing Information Service

- ## What:
  - RIB dumps (3/day), MRT format
  - BGP updates, time-stamped
- ## IPv4
  - Up to 12 locations
  - From 9/1999 onwards
  - Volume: 250 Gbyte/year
- ## IPv6
  - From 10/2002 onwards
  - Few Gbyte

RIS Data Set

- Software available to read the files
- Log files available
- Online
- AUP:
  - Download and analyze as you like
  - Tell us if you publish something

DNSMON

- Monitoring of DNS servers

- Beta service, full service later this year

- Data can be made available for research
  - DNS server responses for all root servers, 7 tld's, from 50-75 locations
  - Same AUP as TTM

Whois DB

- Route, inet, …

- Contact information
  - Name, Address, Phone Numbers
  - Privacy

- Can be mirrored
  - Sign document
  - Restricted

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Registration data

- Files with who is allocated what
  - All 4 (5) registries
- Daily updates on our ftp site since late 2003

- Files with:
  - ripencc|CC|ipv4|base|#|date|allocated
  - ripencc|CC|asn|as#|1|date|allocated
  - ripencc|CC|ipv6|base|/n|date|allocated

- Administrative view

Future plans

- Information services

- "Provide data for the community"
  - Different sets for different target groups
  - Explanation of what is in the data

- New activity in 2004
  - Started
  - Not as far as we had planned
  - Discussion

Questions