CAIDA Active Topology Data

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Overview

- data collection tools

- restricted
  - IP Forward Path Topology
  - (IDTK) Internet Data Tool Kit
  - netacuity (geographic)

- public
  - AS Adjacencies
  - Router-Level Topology
  - NetGeo (geographic)
Data Collection Tools

- **skitter**
  IP address forward path topology and RTT topology from monitor to set of IP addresses

- **iffinder**
  discovers router relationships between IP interfaces
IP Forward Path Topology

wide spread collection of IP path topology

- data
  - 25 skitter monitors in 8 countries and 4 continents
  - destination list
    * one IP address per /24 in routable prefix
    * 54% of prefixes and 5.7% of /24s
    * 1 cycle per day

- time period
  - traces continuously collected

- access
  - http://www.caida.org/tools/measurement/skitter/research.xml
    remote access available on request.
Internet Data Tool Kit

collection of IP topology and supplemental material

- data
  - IP Topology data (2 dozen skitter monitors)
  - Post processed IP topology data/summaries
  - iffinder results for IPs in the topology
  - Hostnames for IPs in topology
  - BGP tables from Route Views
  - sample analysis scripts

- time period
  - 3 weeks starting in April
  - released once per year since 2002

- access
  - http://www.caida.org/tools/measurement/skitter/research.xml
  - Remote access available on request.
AS Adjacencies

AS Adjacencies seen by skitter in a day

- data
  - AS Adjacencies aggregated from skitter IP Paths

- time period
  - 24 hours of IP Paths
  - released once per day

- access (public)
  - http://www.caida.org/tools/measurement/skitter/as_adjacencies.xml
Router-Level Topology

public anonymouesd Router-Level Topology

- data
  - IP links from ITDK
  - iffinder IP-to-router mapping
  - end result is anonymized

- time period
  - 2003 ITDK
    * 3 weeks starting in April 2003

- access (public)
  - http://www.caida.org/tools/measurement/skitter/router_topo/
Geographic

- public
  - NetGeo
    * unsupported since 2002
    * parsed Whois
    * IP,AS mapping to geographic headquarters
  - Owl
    * development
    * parsed Whois
    * IP,AS mapping to Organization
    * Organization to geographic headquarters

- private
  - netacuity
    * Digital Envoy commercial tool
    * IP to Geographic
Conclusion

- restricted
  - http://www.caida.org/tools/measurement/skitter/research.xml
    * IP Forward Path Topology
    * Internet Data Tool Kit

- http://www.digitalenvoy.net/technology/netacuity.shtml
  * netacuity

- public
  - http://www.caida.org/tools/measurement/skitter/as_adjacencies.xml
    * AS Adjacencies

    * Router-Level Topology

    * NetGeo