Inter-domain measurement questionnaire

- internet draft -

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Outline

- Motivation and goals
- Terminology
- Draft content
- Open points
- Conclusions and future work

Motivation

- ISPs monitor their network but have little or no information on other ISPs networks
- To have accurate end-to-end information provider should make their metrics accessible to other ISPs
- → Questionnaire to find out
  - What are the main concerns
  - If an inter-domain collaboration would be beneficial
  - What ISPs are ready to „pay“ for

Goals

- Start a discussion (IETF, IMRG) on inter-domain
  - Measurements
  - Requirements
- Obtain information from ISPs on their effective interest on
  - **Inter-domain measurements** (End-to-end measurements, Inter-domain SLA validation
  - **Data exchange**
- Identify ISP needs
- Promote the need for standard solutions

Terminology

- **Domain:** A domain is a group of computers and devices on a network that are administered as a unit with common rules and procedures.

- **Inter-domain measurement:** A measurement of a flow that starts in a domain and ends in a different one.

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General information

- This section focuses on business coalitions, relationships, contracts between ISPs
  - On existing ones
  - Or on the interest in starting new ones

Measurement

- Interest in measurements across domains
  - For a better evaluation
  - Because existing measures are inaccurate
- Situation today
  - With or w/o data exchange
- Metrics
- Measurement techniques
- And sections planned on
  - Resource usage and allocation
  - Traffic accounting
  - Security
  - Fault diagnosis
  - Troubleshooting

Privacy

Customer Privacy

- (To what extent) customers data access is limited

ISP Privacy

- (To what extent) an ISP has reservations to grant other ISPs access to its own data (topology, Netflow…)
- Under which rules access can be allowed

Protocols and tools

- Investigates the interest in developing, deploying or using a (STANDARDIZED) tool for handling the inter-domain data exchange

- Discusses on the need / use for a protocol (or application)
  - To accurately verify network performance
  - “high”/”low” level?

Open points and future work

- Introduce an inter-domain measurement scenario. So the ISP can specify here which parts are parts come into consideration
- concentrate the standardization effort on the minimum requirements
- Submit the draft v0.0 (IMRG)

Conclusions

- Inter-domain measurement result exchange is a key topic for troubleshooting, End-to-End QoS...

- This draft
  - initiates a new standardization effort
  - Collects needs, requirements, opinions, views…

- Tries to identify
  - What ISPs want
  - What ISPs are ready to pay

  → to concentrate the standardization effort on the minimum requirements

Thank you...

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