Gap Analysis of IPPM Passive Measurements
draft-zheng-ippm-passive-gap-analysis-00.txt

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Motivation

- IPPM WG has been recently re-chartered, passive measurement and hybrid measurement methods are now included

- Previous work done in IPPM WG has the assumption that the measurement method of the metrics is active measurement

- This draft performs a gap analysis of the current status of work in the IPPM WG in terms of passive measurements

Passive VS Active

- Passive measurements measure real traffic and do not increase the traffic on the network for the measurements

- Active measurements rely on the capability to inject test packets into the network, but as such it creates extra traffic

- Both passive and active measurements have their strengths and should be regarded as complementary

Gap Analysis

- Framework for IP Performance Metrics

  ✓ RFC2330 is the framework for metric development

  ✓ Many of the current framework aspects are still applicable to passive measurement, but some of them are not applicable

  ✓ An updated framework document is needed
    - Equivalent concepts need to be carried over as much as possible with passive-friendly definitions

Gap Analysis

- IP Performance Metrics

    ✓ More than 30 metrics defined follow the framework for IP performance metrics [RFC2330]

    ✓ The implicit assumption is the measurement method of the metrics is active measurement

    ✓ Careful examination and thorough analysis needs to be made as to their applicability for passive measurement

Gap Analysis

- Registry

  ✓ Previous work on registry is obsolete due to "very few users, if any",   new work is ongoing

  ✓ The metrics for passive measurement should be taken into consideration for registry structure designs

Future Work

- Framework for metrics
  - ✓ A passive-friendly updated framework document is needed for passive measurement
- Metrics
  - ✓ Careful examination of currently defined metrics, particularly the measurement aspects
  - ✓ New metrics may also need to be defined for passive measurement
- Registry
  - ✓ The passive measurement should be taken into consideration for the ongoing registry structure design work

Request For Comments

- Your involvement and feedback are very important