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✓ Previous work on registry is obsolete due to “very few users, if any”, new work is ongoing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