

Rate Measurement Problem Statement

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draft-ietf-ippm-rate-problem-00

Motivation

- Many possible Rate Measurement Scenarios – Narrow the scope
- Access-Rate Measurement
 - Has Continued Industry Attention
 - Many different approaches
 - Need to avoid mistakes: No comparison of Apples & Oranges
 - Topic of this draft and discussion

Scope

- Access Rate Measurement on Production Networks
 - Rates at edge \ll core, likely bottleneck ≤ 100 Mbit/s (timing accuracy)
 - Asymmetrical ingress and egress rates
 - Largest scale at edge: low complexity needed in device at user end
 - Tester has control of sender/receiver

Scope (contd.)

- Access Rate Measurement on Production Networks
 - Active measurements (IPPM charter)
 - Both In-Service and Out-of-Service
 - Includes service commissioning activity
- Non-Goals
 - No protocol solution in this draft
 - Exact methods of meas (but categories discussed)

Open Questions for Discussion

- The actual path used may differ between user traffic and test traffic.
 - Where will this happen, on *access networks*?
- May influence the rate measurement results for some forms of access
- This issue requires further study to list the likely causes for this behavior.
 - The possibilities include IP address assignment, and transport protocol used (where TCP packets may be routed differently from UDP).

Conclusion + Next Steps

- This measurement problem is a hot-topic in the Industry
- Draft discussed in-person at IETF-83 and on the list months ago...
- Additional Comments today?
 - Need to close on problem statement to get to the real work...

backup

Summary of Specs

- Minimize test traffic when necessary
- Possible assessment of background
- Architecture MAY be either 1 or 2 way
- SHALL support packet ensemble tests
 - 4 categories, others are OPTIONAL
- Variable (asymmetrical) payload and ensemble lengths among streams MUST be communicated