Rate Measurement Test Protocol Problem Statement

Al Morton March 2014 draft-ietf-ippm-rate-problem-05

Scope

Access Rate Measurement on Production Networks

- Rates at edge << core, likely bottleneck</p>
- 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
- No Exact methods of meas (but categories discussed)

Revisions (05)

Comments: Thanks Barry Constantine
 Example for "Opportunistic In-Service"

 (traffic is low/none outside normal business hours)

 Clarified a few requirements

 3 roles, but REPORTER may be combined with SENDER

Optional ability to gen traffic w/ VLAN tags

Conclusion + Next Steps

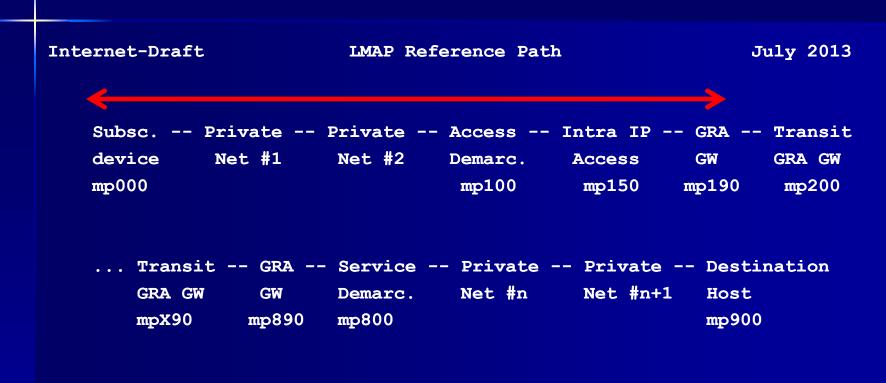
- Are we done?
 - Fairly continuous comments in 2013
 - Working LMAP before it was named...
- Additional Comments?
 - Need to close on problem statement to get to the real work (test control protocols)
- draft-morton-ippm-twamp-rate-05
 draft-morton-ippm-twamp-tcp-00

backup

TCP testing (new req S4)

- Capability to Control an Open-Loop TCP test (MBM)
 - Sender: Generate packet streams at controlled rates & packet spacings
 - Continue sending (open-loop)
 - Receiver performs normally, with large enough window to enable Sender behavior
- Capability to Control a "normal" BTC measurement
 - Examined in draft-morton-ippm-twamp-tcp-00
 - Two Modes: Initiator and Listener
 - Mixed Security Mode is compatible (na in OWAMP)
 - New Request-TW-Session Command
 - Select Congestion Control from a list? (e.g., AIMD)

draft-ietf-ippm-Imap-path-00



GRA = Globally Routable Address, GW = Gateway

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 – 1 of 4 categories, others are OPTIONAL Variable (asymmetrical) payload and ensemble lengths among streams MUST be communicated

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