draft-ietf-ippm-loss-episode-metrics-01 Loss Episode Metrics for IPPM

Nick Duffield, Al Morton, AT&T Joel Sommers, Colgate University

IETF 80, Prague, March 2011

Changes since IETF 79

- ☐ IPR disclosure
 - + Supersedes IPR disclosure for previous individual draft
 - + https://datatracker.ietf.org/ipr/1354/
- □ Draft adopted as WG item in 2010
 - → Previous individual draft draft-duffield-ippm-burst-loss-metrics
- □ Comments from Tiziano Ionta
 - + Clarified several metric definitions in the Intro, and in section 5:
 - → "The metrics report loss episode durations and frequencies in terms
 of packet counts, since they do not depend on the actual time
 between probe packets. The final metrics of Section 6 incorporate
 timescales and yield durations in seconds, and frequencies as per
 second."

Conclusion

- ☐ Please read the draft and comment
- □ Please post any questions from this WG session to the mailing list
- ☐ We hope for WGLC before Quebec/IETF-81

A one page summary of the draft

☐ Fact: packets in a flow are not generally lost independently Frequent small glitches vs. local burst (at same average loss rate) (0,0)(0.1)(1.1)(0,0)Motivation: metrics of temporal structure of packet loss Target use: SLAs, application requirements (e.g VoIP) Object of study: loss episodes (of consecutively loss packets) Metrics: average duration and frequency of loss episodes Methodology: bi-packet probes, sent as discrete Poisson stream ☐ Analysis: metrics depend only on frequencies of probe outcomes + 4 possible outcomes (0,0), (0,1), (1,1), (1,0) where 1 = lost, 0 = not lost Summary: extension of RFC 2680 to case of correlated loss