Packet loss Measurement Model
draft-bhaprasud-ippm-pm-03

By

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Overview

- Objective:
  - Define fine granularity performance measurement between end points based on SLA
    - COS based Loss Measurement
    - Color Based Loss Measurement
    - COS and Color based Loss Measurement
    - ….
  - Focus on measurement model instead of protocol design
    - Model is agnostic to overlay and underlay.
  - This model can be used for Active and Passive measurements.

- Motivation:
  - measuring the network performance and assessing network quality to meet user expectation is very challenging.
  - PM related telemetry become important for better troubleshooting and fault localization.
    - Especially information related network element and interface in the path involved with the session
  - ITU-T SG12 Q16 has initiated a new work on "Framework for Intelligent Network Analytics and Diagnostics "
    - Performance data is one of data source for network analytics
  - iOAM work discussed recently focuses on carrying OAM and telemetry data but the measurement PM related telemetry data is not covered.

Document Status Update

- The latest version v-03 is submitted with the following changes:

- 1 Address the relationship with MEF work

- 2 Expand the scope to cover delay measurement and delay variation measurement.

- 3 Add more details to section 4.

- 4 Update definitions in the section 2.

- 5 Change the title to performance measurement model.

Measurement Models

- Complete Data measurement in one direction.
- Color based Data measurement.
- COS based Data measurement.
- COS and Color Based Measurement.
- Active and Passive Measurement.
- Provision for Real Time analytics.
- Small mile stone towards Self Driving networks

Use Case for Packet loss Measurement Model

Both P2P and MP2MP are covered. For instance in a P2P scenario:

CUSA   **Router A**   P2P Service   **Router B**   CUS A

Service	Bandwidth (SLA)
Voice Service	40% strict
Service A	30%
Service B	20%
Service C	10%

Next Steps

- Draft Must be reviewed.
- Comments anticipated.

Thank you