A YANG Data Model for Client Signal Performance Monitoring

CCAMP WG, IETF116, Yokohama

draft-zheng-ccamp-client-pm-yang-07

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Motivation

• The life cycle of connection:
  – Topology collected;
  – Tunnel created;
  – Client-signal deployed;
  – **Performance Monitoring.**

• PM based on configured client signals;
  – Ethernet service;
  – Transparent client signals;

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Layer2</th>
<th>Layer1</th>
<th>Layer0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay/Latency</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Bit Error Rate(BER)</td>
<td>?</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Packet Loss</td>
<td>✔</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Jitter</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Byte/Packet number</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Power</td>
<td>✗</td>
<td>✗</td>
<td>✔</td>
</tr>
</tbody>
</table>
Model Relationship

Importation & Augmentation:
- We imported the ietf-eth-tran-service and ietf-trans-client-service, in the client-signal-yang draft;

Other PM-related Documents:
- draft-yu-performance-monitoring-yang: focus on the PM mainly on the resources, instead of the client-signal;
- draft-ietf-teas-actn-pm-telemetry-autonomics: focus on the PM mainly on VN and Tunnels, instead of service (covered in this document);
Model Structure - PM

**Issue #88**: to align the rate for packet traffic, and understand how the rate is measured;
- dependent on the resource PM;

**Issue #89**: at which point the measurement is required?
Model Structure - OAM

```
+-rw oam-config
  |  +--rw source
  |  |  |  +--rw md-name? string
  |  |  |  +--rw ma-name? string
  |  |  |  +--rw ma-level? string
  |  |  |  +--rw meg-id? string
  |  |  |  +--rw meg-level? string
  |  |  |  +--rw mep-id? uint8
  |  |  |  +--rw remote-mep-id? uint8
  |  +--rw destination
  |     |  |  +--rw md-name? string
  |     |  |  +--rw ma-name? string
  |     |  |  +--rw ma-level? string
  |     |  |  +--rw meg-id? string
  |     |  |  +--rw meg-level? string
  |     |  |  +--rw mep-id? uint8
  |     |  |  +--rw remote-mep-id? uint8
  |  +--rw cc-interval? identityref
  |  +--rw lm-interval? identityref
  +--rw dm-interval? identityref
```

OAM configuration set

Interval setting
Next Step

• Request for WG adoption
  – Confirm the model relationship is properly designed;

• Will continue working on
  – The clarification with model relationship
  – The details of each PM parameter, including definition and measurement