A YANG Data Model for Client Signal Performance Monitoring

IETF 108 CCAMP

draft-zheng-ccamp-client-pm-yang-02

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Model Relationship

- Performance need to be monitored for operation need for the client signal in draft-ietf-ccamp-client-signal-yang-01;
- Potential Parameters to be monitored:
  - Latency, BER, Packet Loss, Bandwidth, Jitter, Byte/Packet Number, Power, etc...

![Diagram]

- **PE1 (OTN)**
- **PE2 (OTN)**
- **Controller**
- **CE1(Eth)**
- **CE2(Eth)**

**Performance Monitoring**

- Single-ended
- Dual-ended
Changes since -01 (in pm module)

• Combined two PM models (Ethernet, transparent) into one;
• Added the measure-method to specify how to do PM;
  – Measure by loopback or measure at ingress;

```xml
module: ietf-service-pm
  +--rw performance-monitoring
  +--rw service-pm* [service-name]
    +--rw service-name union
    +--rw task-pm-enable? boolean
    +--rw granularity? identityref
    +--rw performance-data-config* [parameter-name]
      |   +--rw parameter-name identityref
      |   +--rw measure-method? identityref
```

To index the service;

Specify PM method;
Changes since -01 (in pm module)

- Re-formatted the service-pm structure;

```
---ro performance-data* {parameter-name}
  ---ro parameter-name identityref
  ---ro parameter-value* [index]
    ---ro index uint64
    ---ro value performance-parameter-value
    ---ro value-unit string
    ---ro value-description? string
    ---ro start-time? yang:date-and-time
    ---ro end-time? yang:date-and-time
```

- Delay, BER, etc...;
- Numerical Value;
- Unit (ms, Gbps, etc.)
- Time Interval for PM
OAM Augmentation in PM Model

This Augmentation applies to Ethernet Only.
We want to hear from WG...

- Is the problem valid?
- Match with the WG scope?
- Request for WG Adoption.

Github: https://github.com/haomianzheng/IETF-ACTN-YANG-Model/tree/master/YANG/ccamp/client-pm