

A YANG Data Model for L1 Connectivity Service Model (L1CSM)

CCAMP WG, IETF 109

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Authors:

Young Lee (Samsung)

Kwangkoog Lee (KT)

[Haomian Zheng \(Huawei\)](#)

Oscar Gonzalez de Dios (Telefonica)

Daniele Ceccarelli (Ericsson)

Contributors:

Italo Busi, Giuseppe Fioccola, Dhruv Dhody

Document Status

- Fixed comments in early YANG Doctor Review
 - Coordinate the MEF structure with ITU;
 - Editorial changes;
- Github repository:
<https://github.com/haomianzheng/IETF-ACTN-YANG-Model>

Coordination between MEF and ITU

- MEF Tuple [MEF63]: <protocol, coding function, optical interface>
- ITU: client-signal [layer1-types];
- GE as an example:

MEF	ITU
Protocol: Ethernet	ETH-1Gb, identityref to l1-types:client-signal
Coding: 1000BASE-X	
Optical interface: SX PMD 38, LX PMD 38, etc.	

```
+--rw access
|
|  +--rw unis
|  |
|  |  +--rw uni* [id]
|  |  |
|  |  |  +--rw id                string
|  |  |  +--rw (uni-access-type)?
|  |  |  |
|  |  |  |  +--:(mef)
|  |  |  |  |
|  |  |  |  |  +--rw protocol    identityref
|  |  |  |  |  +--rw coding      identityref
|  |  |  |  |  +--rw optical-interface identityref
|  |  |  |  +--:(itu)
|  |  |  |  |
|  |  |  |  |  +--rw client-signal identityref
```

Changes in layer1-types

- Common 'client-signal' are having multiple bases:
- List of identities that with multiple bases:
 - STM-1/4/16/64/256;
 - OC-3/12/48/192/768;
 - FC-100/200/400/800/1600/3200;

```
identity STM-1 {  
  base client-signal;  
  base "coding-func";  
  description  
    "Client signal type of STM-1;  
    STM-1 G.707 (N=1) coding function.";  
  reference  
    "RFC7139/ITU-T G.709  
    MEF63: Subscriber Layer 1 Service Attributes";  
}
```

Next Step

- To describe the process rule for inconsistent configuration on $\langle p, c, o \rangle$ ([#72](#))
- Coordinate the performance metric part with a few other documents;

Thank you!