YANG Models for OTN Client Signals

CCAMP WG, IETF101, London, UK

draft-zheng-ccamp-otn-client-signal-yang-02

draft-zheng-ccamp-client-topo-yang-02

draft-zheng-ccamp-client-tunnel-yang-02

Authors:

Haomian Zheng (zhenghaomian@huawei.com)

Aihua Guo (aihuaguo@huawei.com)

Italo Busi (Italo.Busi@huawei.com)

Yunbin Xu (xuyunbin@ritt.cn)

Yang Zhao (zhaoyangyjy@chinamobile.com)

Xufeng Liu (Xufeng_Liu@jabil.com)

Giuseppe Fioccola (giuseppe.fioccola@telecomitalia.it)

Contributors:

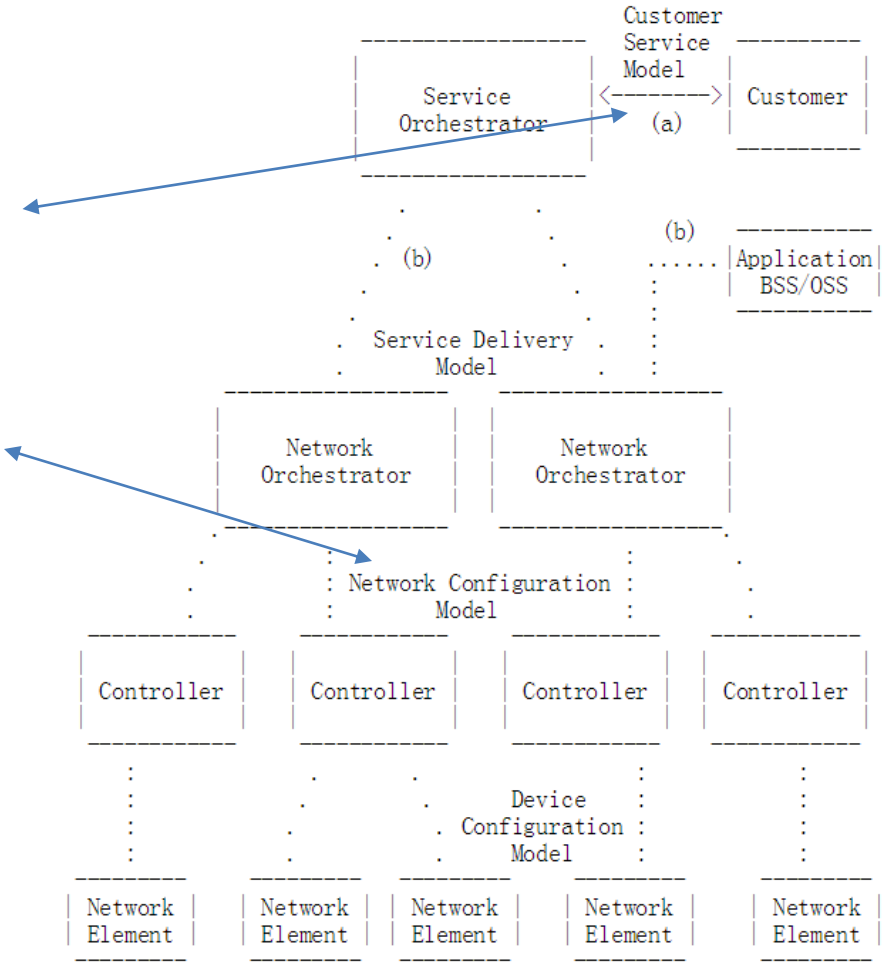
Yanlei Zheng, Zhe Liu, Zheyu Fan, Sergio Belotti, Yingxi Yao

Model Relationship

Q: what is the relationship between the LxSM and this work?

The LxSM (mainly L2SM) is a customer service model which sits on I/F (a);

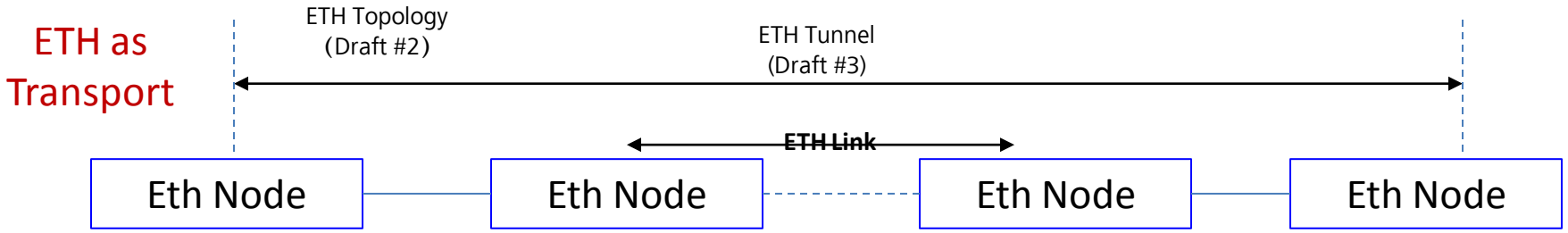
The Client (mainly ETH) model is a network configuration model, which will directly be used between controllers for Ethernet Configuration.



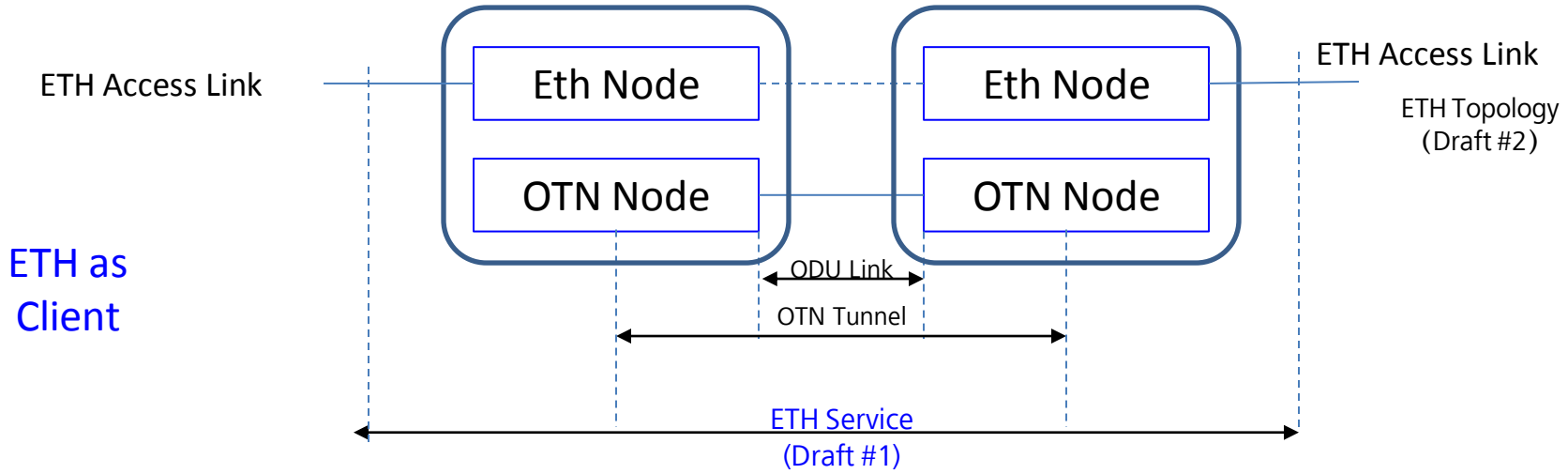
Application Scenarios

- Different Model Application Scenarios:

- **ETH as a transport network**: client-free; Set up ETH Tunnel (Draft #3) based on ETH Topology (Draft #2);



- **ETH as a client of transport network**: Configure the Service (Draft #1) and update the topology (Draft #2), including the nodes and ETH access links.



Changes of draft-zheng-ccamp-otn-client-signal-yang (1)

- NMDA-Compliance
- ETH modeling Adjustment;
  - Add Groupings for ETH service PM threshold & statistics;
  - Add the leaves for time log (creation, updated)
  - Add more types: p2p-svc, rmp-svc, …
  - Provide more text description;

Changes of draft-zheng-ccamp-otn-client-signal-yang (2)

- Add the client signal models;

```
module: ietf-trans-client-service
 +--rw client-svc
    +--rw client-svc-instances* [client-svc-name]
       +--rw client-svc-name        string
       +--rw client-svc-descr?      string
       +--rw access-provider-id?    te-types:te-global-id
       +--rw access-client-id?      te-types:te-global-id
       +--rw access-topology-id?    te-types:te-topology-id
       +--rw admin-status?          identityref
       +--rw src-access-ports
       |  +--rw access-node-id?    te-types:te-node-id
       |  +--rw access-ltp-id?     te-types:te-tp-id
       |  +--rw client-signal?     identityref
       +--rw dst-access-ports
       |  +--rw access-node-id?    te-types:te-node-id
       |  +--rw access-ltp-id?     te-types:te-tp-id
       |  +--rw client-signal?     identityref
       +--rw svc-tunnels* [tunnel-name]
       |  +--rw tunnel-name     string
       +--ro operational-state?     identityref
       +--ro provisioning-state?    identityref
```

Client signal model is different with ETH models. Difficult to extract a common base, therefore we separate the two set of models;

Changes of draft-zheng-ccamp-client-topo-yang

- NMDA-Compliance;
- Adjust the following parameters:
  - Remove Node-mac-address;
  - Add the support for configuring symmetrical or asymmetrical bandwidth profiles on ETH links;
  - Add the support for reporting the VLAN classification and operations supported by ETH access links;
  - Type changes of client-facing: from empty to boolean;
- Other text descriptions update;

Changes of draft-zheng-ccamp-client-tunnel-yang

- NMDA-Compliance

Open Issues & Next Step

- Broader the scope of the TE tunnel server from ‘OTN’ to ‘transport’;
- Difficulties on extract a common model for ETH and other client models, as a base model:
  - **Extract ETH and move first;**
- Ask for WG Adoption;
- Align with other WG for ETH model;
  - IEEE/MEF;
  - I2rs/netmod;