YANG Models for OTN Client Signals

CCAMP WG, IETF100, Singapore

draft-zheng-ccamp-otn-client-signal-yang-01
draft-zheng-ccamp-client-topo-yang-01
draft-zheng-ccamp-client-tunnel-yang-01

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Where Do different models sit?

Client Service Model:
Describe Service with network as a ‘black box’

Client Service is different from Tunnel: Server tunnel is used to carry Client service
Request of ETH service will drive the set up of OTN Tunnel.

Once the ‘virtual link’ on client layer appears, there should be corresponding Topology change;
  ➢ Will augment the generic TE topo model;
Controller Interactions (2)

- Iteratively, client layer can also request for tunnel set up;
  - Ethernet Tunnel model is used to support the request;

1. Request a ETH Tunnel
2. an ETH Tunnel set up
3. Update ETH topology
## Potential Client Service Types

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Client Signal Type</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDH service</td>
<td>STM-N (N=1,4,16,64,256)</td>
<td>Client service model</td>
</tr>
<tr>
<td>SONET</td>
<td>OC-N (N=3,12,48,192,768)</td>
<td>Client service model</td>
</tr>
<tr>
<td>ETH</td>
<td>FE,GE,10GE WAN/LAN,40GE,100GE</td>
<td>ETH service model</td>
</tr>
<tr>
<td>SAN storage</td>
<td>ESCON,FICON,FICON4G,FICON8G,FC100,FC200,FC400,FC800,FC1200</td>
<td>Client service model</td>
</tr>
<tr>
<td>Video/Others</td>
<td>DVB-ASI,SDI,HD-SDI, HD-SDIRBR, 3G-SDI, 3G-SDIRBR</td>
<td>Client service model</td>
</tr>
</tbody>
</table>
Mainly for requesting client service by specifying service attributes;
YANG Tree – Ethernet topology

Update the client (ETH as an example) layer topology by augmenting TE-topo.
Tunnel model will be needed once there is tunnel in client layer (ETH as an example) request.
Open Issues

• Only Ethernet Service Included
  – Other client signals to be added;

• Align with other YANG models in I2RS/Netmod drafts and IEEE 802.1

• Not sure if different client models have a common or generic part, as a base model;

• NMDA-Compliance
Next Step

• Confirm: this work is useful;

• Work together with T-NBI design team, fit into the use cases;