

YANG Data Models for Transport TE FGNM Extension Mode

CCAMP WG, IETF120

draft-yu-ccamp-te-fgnm-yang-01

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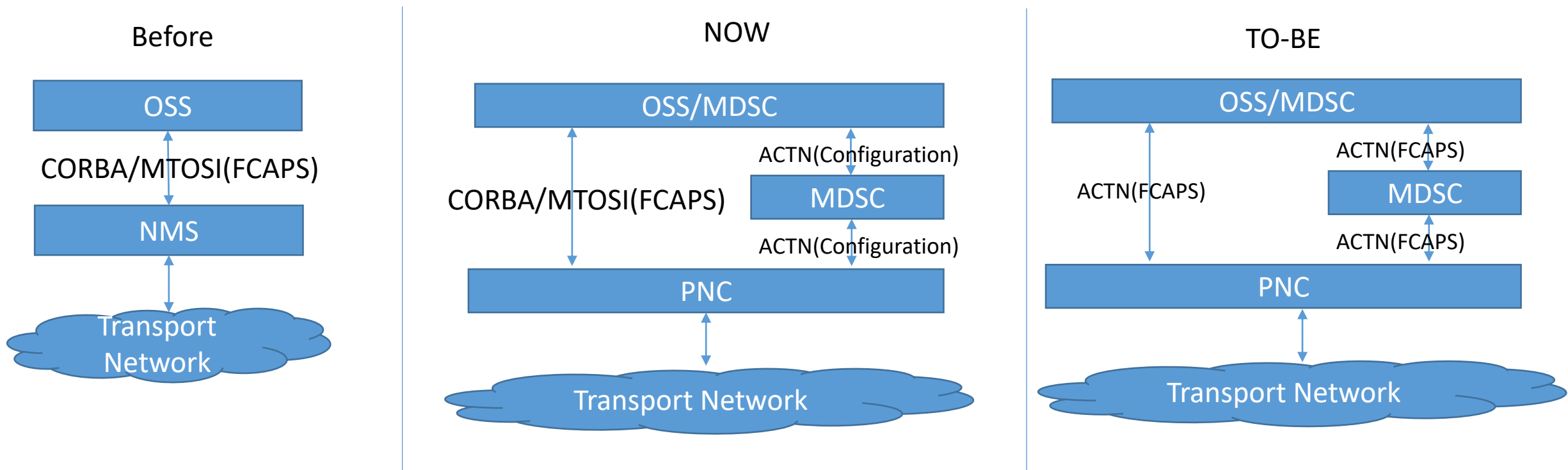
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Background Introduction

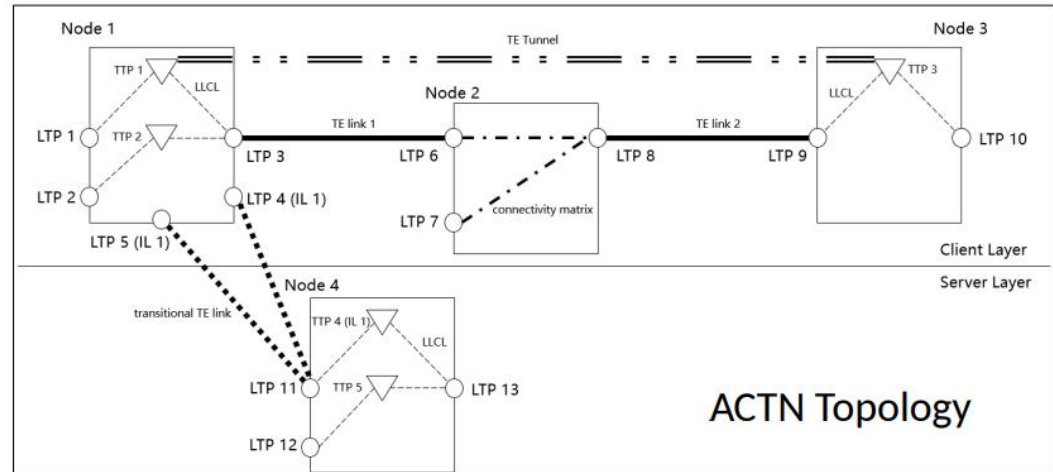


- The emerge of RESTCONF increases the complexity of system integration.
- To minimize the cost of migrating from TMF O&M to RESTCONF/YANG, it is better to support FCAPS with TMF models
- Alternative approaches for FCAPS with consistent interfaces, OSS/MDSC (to MDSC) to PNC

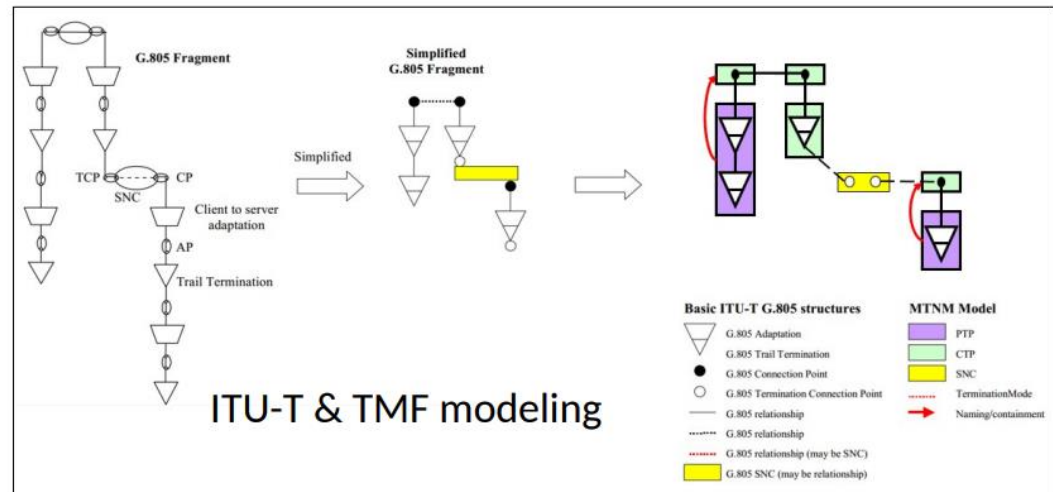
How to Support FCAPS by ACTN Interfaces?

ACTN Object	TMF Object
Network	NA
Node	Management Element
Link	Topology Link
TP	PTP
TTP	CTP/FTP
Tunnel	SNC/XC
NE	Management Element
component	equipment holder/equipment
Client signal	NA
Ethernet Client signal	NA
NA	Protection Group
NA	Equipment Protection Group

Table 2: Mapping of ACTN objects with TMF objects



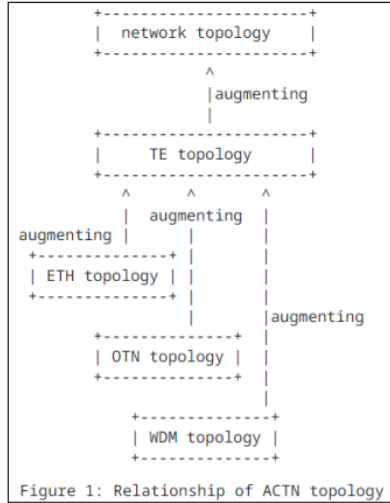
ACTN Topology



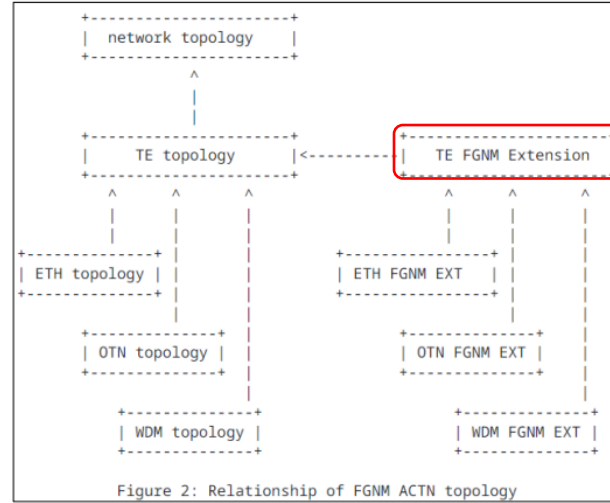
ITU-T & TMF modeling

- To support TMF FCAPS function by ACTN, the objects in the data model need to be mapped.
- It is also needed to compare the parameters of each object between TMF and ACTN, and supplement it in ACTN modeling, known as FGNM

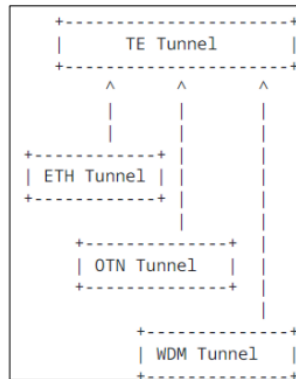
How to do the extensions?



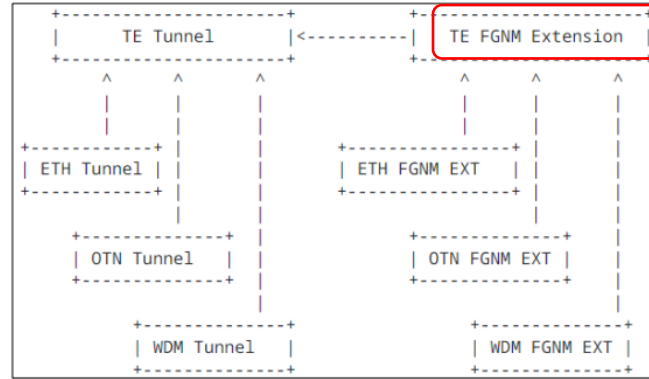
Add FGNM Extension



This draft only focus on the FGNM extension generic for all the layers.



Add FGNM Extension



What Has Been Included In The Current Model?

TE Topology FGNM Extension

- Lifecycle and usage of TTP

TE Tunnel FGNM Extension

- Modeling of P2MP and MP2MP tunnel
- More kinds of restoration
- TTP Hop (Path Constraint)

Next Step

- Identify more generic FGNM extension applicable for all the layers;
- Start the study on the layer-specific FGNM extension;

- Call for WG adoption
 - Github: <https://github.com/YuChaode/draft-yu-ccamp-te-fgnm-yang>