

Gap Analysis for Layer and Technology Independent OAM Management in the Multi-Layer Environment

LIME WG, IETF91, Honolulu

draft-txh-opsawg-lime-gap-analysis-01

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The draft would like to...

- ...analyze the existing management plane OAM related works in different SDOs
 - Information Model and Data Model for OAM in ITU-T, IEEE, MEF...
- ...find the gap the key objectives of Layer Independent OAM Management
- ...note that the analysis does not target to the (existing) Transport L0-L2 OAM, but to leverage the developing generic layer independent OAM management for L3-L7 (and L2.5 MPLS OAM)

Revision History

- 00 was uploaded on 26/9/2014
- Latest version is 01, uploaded on 26/10/2104
- The update 00→01:
 - Considered the comments on L0-L2 OAM
 - See draft-lam-lime-summary-l0-l2-layer-independent
 - Updated YANG Model for OAM Management
 - Added some drafts for reference

Existing OAM Related Works (in 00/01)

- Survey of ITU-T Work from L0-L2
- Management Information Models
- IEEE CFM MIB
- MEF SOAM FM and PM MIB
- IETF Technology-specific MIB Series
- MEF CFM and SOAM YANG Data Model
- YANG Model for OAM Management and Technology-specific extensions

Existing OAM Related Works

	Layer Independent (Generic)	Layer specific			
		L0, L1 (Lambda, SDH, OTN)	L2 (Ethernet)	L2.5 (MPLS)	L3 -
OAM	ITU-T G.806 [Note1]	-- [Note1]	IEEE802.1Q ITU-T G.8013	<i>IETF RFCs</i> (Not in draft)	<i>IETF RFCs</i> (Not in draft)
Info Model	ITU-T G.gim (In progress)	ITU-T <i>G.774</i> G.874.1	ITU-T G.8052	ITU-T G.8152 (in progress)	
MIB			IEEE802.1Q	IETF draft MPLS-TP MIB	RFC 7113 (BFD)
YANG Module	draft-wang-lime-rpc- yang-oam- management <i>et all</i>		MEF 36 MEF 38		draft-wang- bfd-yang- oam

[Note 1] G.806 specifies the generic processing of transport equipment functions, including handling of OAM, defect correlation, and alarm suppression, etc. .Specific to L0 and L1 are found in G.783 and G.798.

Next Step...

- Further coordination with existing documents
 - draft-lam-lime-summary-l0-l2-layer-independent
 - Other YANG drafts for YANG OAM
 - Anything else for input?
- Start analysis generic layer-independent and technology-independent configuration, reporting and presentation for OAM mechanisms
- Comments and Feedback are welcome.