

LDP Extensions for Proactive OAM Configuration

draft-ietf-pals-mpls-tp-oam-config-03.txt

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Motivations

- To satisfy one requirement defined in RFC 5654 (MPLS-TP Requirements)
 - 51 The MPLS-TP control plane MUST support the configuration and modification of OAM maintenance points as well as the activation/ deactivation of OAM when the transport path or transport service is established or modified.
- This document define LDP extensions for proactive PW OAM configuration
- Two company documents exist:
 - RFC 7487
 - draft-ietf-mpls-lsp-ping-mpls-tp-oam-conf

OAM Configuration

- Three types of operation:
 - Establishment of OAM Entities and Functions
 - Adjustment of OAM Parameters
 - Deleting OAM Entities
- OAM configuration steps:
 - Disable Alarm
 - Setup/configure/adjust OAM entities/functions
 - Enable Alarm
- Leverage Label Mapping and Notification messages
 - Request: Label Mapping message
 - Response: Label Mapping/Release and Notification messages
 - With specific Status Code to reflect relevant configuration results

TLVs/sub-TLVs

- PW OAM Administration TLV
 - Setup/delete MIP/MEP entities
 - Enable/disable OAM alarm
- PW OAM Functions TLV
 - To configure and enable specific OAM functions
 - Using a number of flags and relevant sub-TLVs to configure particular OAM functions, which include:
 - CC/CV/FMS/PM Loss/Delay/Throughput

Updates since ver-00

- Removed the analysis sections
- Separate the SS-PW and MS-PW configuration procedures, rewrite relevant sections
- Align the sub-TLVs definitions of the “PW OAM Functions TLV” with those definitions defined for “MPLS OAM Configuration Sub-TLV” (RFC7487) and MPLS OAM Functions TLV (draft-ietf-mpls-lsp-ping-mpls-tp-oam-conf)
 - To make PW OAM Functions TLV has the same sub-TLVs definitions as MPLS OAM Configuration Sub-TLV and MPLS OAM Functions TLV, but has different registries and error handling process
- Document clean up
 - Remove unused acronyms and references
 - Add new references

Next steps

- Ask for more review and comments
- WG Last Call