

# GMPLS-based Hierarchy LSP Creation in MRN/MLN

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draft-zhang-ccamp-gmpls-h-lsp-mln-05.txt

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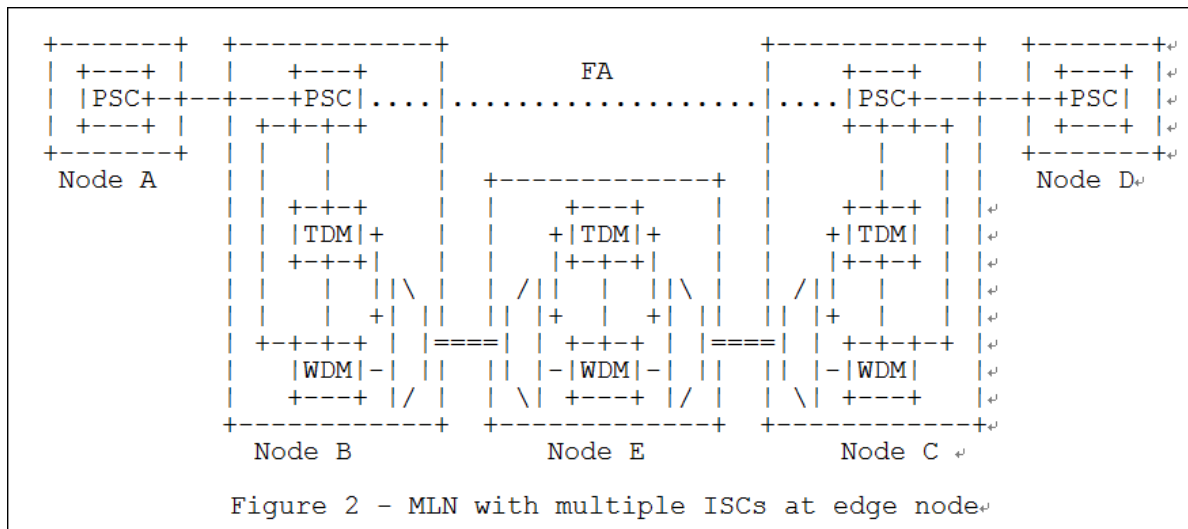
# Overview of this Draft (Version 05)

- Overview of the draft:
  - Revived due to people interest
  - This draft allows explicit H-LSP region descriptions
- What brings this solution
  - Multi-layer ERO is already supported
    - FA parameters are based on local policy
    - Or require bottom-up provisioning
  - In some cases it is useful to have a better/explicit control of the region change:
    - PCE/Explicit route can explicitly control the FA-LSPs created based on policy /TE decisions

# MLN/MRN Signaling Local Decisions

- In MLN/MRN, there may be **multiple switching capabilities** and/or **multiple switching granularities** and/or **adaptation functions** in the server layer network
- The source node of the client layer connection needs to specify:
  - 1) which **server layer switching capability**

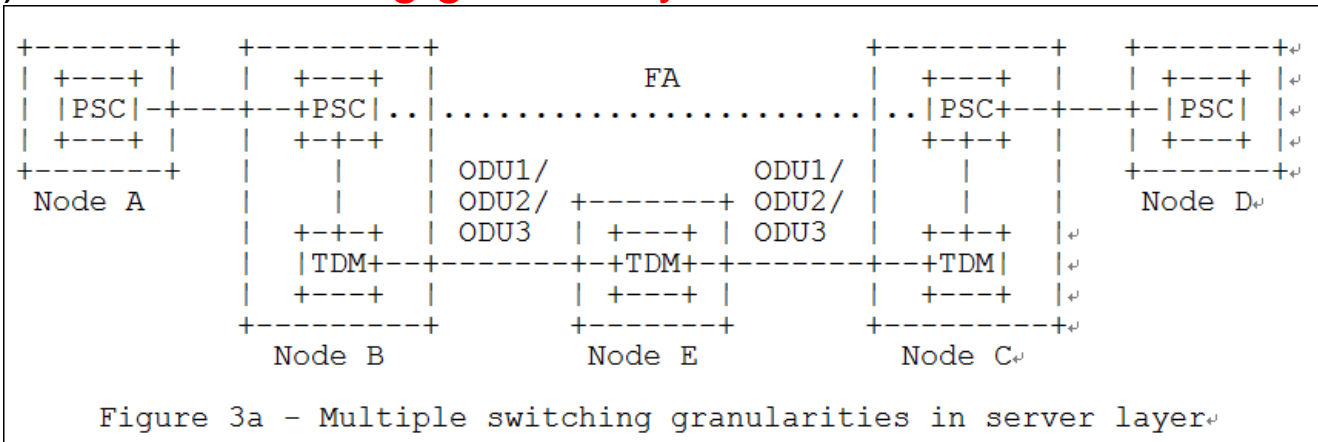
**Example:**



# MLN/MRN Signaling Local Decisions

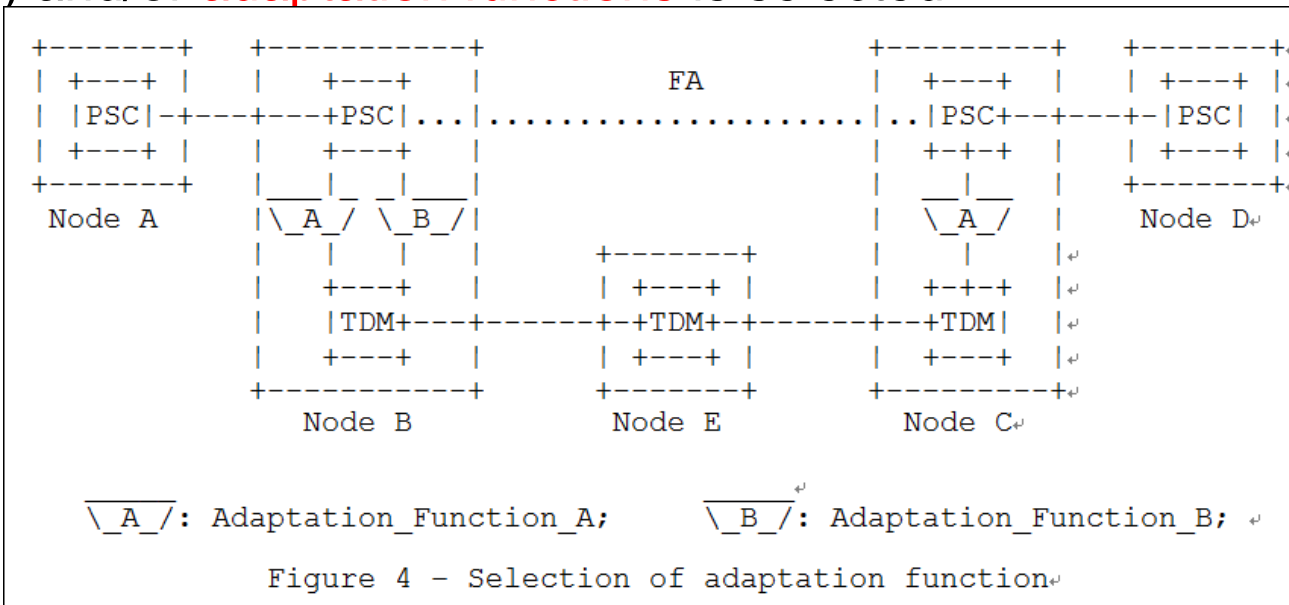
## 2) and/or switching granularity

Example:



## 3) and/or adaptation functions is selected

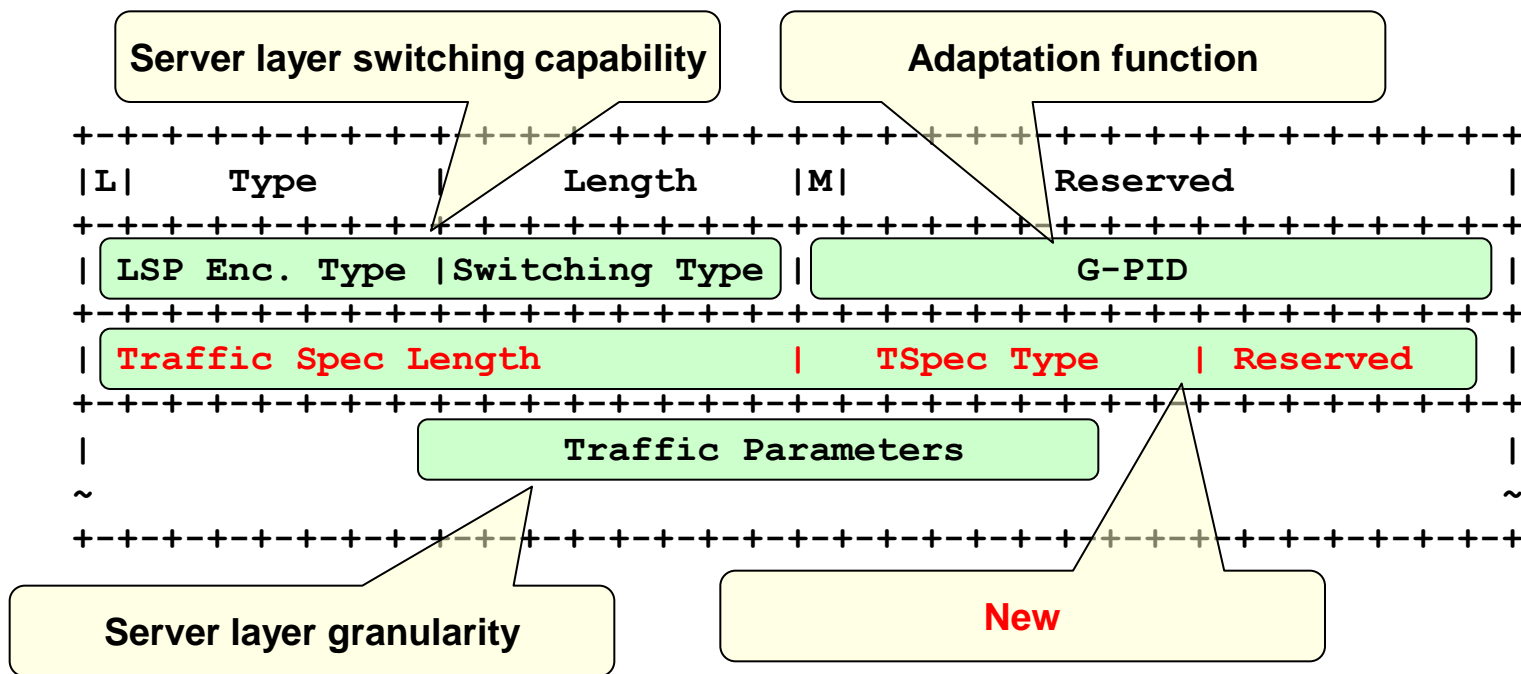
Example:



# Changes from Version 04

- Provided different signaling:
  - Existing solution ([SERVER\\_LAYER\\_INFO](#) sub-object)
  - New section listing available alternative solutions
    - using the mechanism defined in < draft-ietf-ccamp-lsp-attribute-ro-02 >;
    - using SERO/ERO to simplify processing
- Editorial changes

# SERVER\_LAYER\_INFO sub-object Required Information



- **Traffic Spec Type/Length:** To handle variable-length Traffic parameters (RFC6004 for instance)
- This allows for **later sub-object extension**

# Discussion

- Background

Explicit FA-LSP region is part of inter-layer PCEP extensions (<draft-ietf-pce-inter-layer-ext-07>). Discussion converged that this is related to Explicit routing signaling information, thus should be defined in **RSVP-TE ERO (SERVER\_LAYER\_INFO ERO subobject defined in this draft)**

- Further action

**Remove the PCEP sub-object** defined in < draft-ietf-pce-inter-layer-ext-07 > and refer to this draft.

**Suggestion?**

# Next Step

- WG adoption?
- Refine it based on the feedback from the meeting or mailing list