PCEP extensions for GMPLS

PCE WG, IETF 84,

draft-ietf-pce-gmpls-aps-req-06 draft-ietf-pce-gmpls-pcep-extensions-06

Authors & Contributors

Difference from 05

Requirements:

- Refined the requirement on label restrictions
- Editorial updates (Mainly references)
- Welcome Cyril Margaria as new co-author.

Solution

- editorial points: manageability section has been added
- Encoding:
 - Condensed Label information (6->2 TLVs)
 - GENERALIZED-BANDWIDTH: use only one OT

ENDPOINTS

Previous version 6 TLVs

Label restriction : LABEL, UPSTREAM LABEL, LABEL SET

Reoptimization:

OLD_LABEL/OLD_UPSTREAM_LABEL

Label suggestion : SUGGESTED_LABEL_SET

ENDPOINTS

- New: move the upstream/reoptimization as flags in the LABEL SET.
- A LABEL can be represented as a LABEL_SET with one LABEL.
- →Cons:
 - → Coding less efficient
- \rightarrow Pro:
 - → Less TLVs (2 versus 6)
 - → PCE procedure are not impacted

GENERALIZED-BANDWIDTH one object type,

Reason:

- PCEP OT allows 16 TSpec
- RSVP allows 255 TSpec types → Mismatch

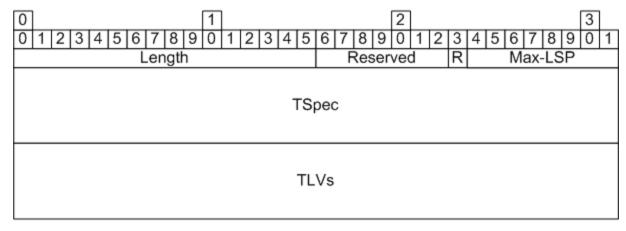
Encoding change: have the Tspec type part of object body (in orange)

0	1	2		3	
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5	6 7 8 9 0 1	2 3 4 5 6 7	8 9 0 1	
Length		Tspec type	e Reserv	/ed R O	
TSpec					
TLVs					

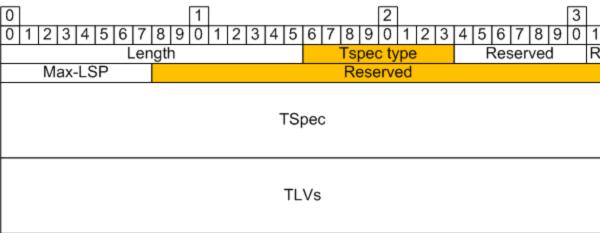
GENERALIZED-LOAD-BALANCING

Same logic as GENERALIZED-BANDWIDTH

Previous



New



Next Steps

- The document addressed the comments raised
- Authors think the solution is ready for Last Call,
 - Last call after reqs.

Questions?