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

→ 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)
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?