

draft-ppsenak-ospf-te-link-attr-reuse-01

Peter Psenak, Cisco

Acee Lindem, Cisco

W. Henderickx, Alcatel-Lucent

J. Tantsura, Ericsson

H. Gredler





Problem Summary

- Many link attributes have been defined in OSPF in the context of the MPLS TE and GMPLS
- Some of them are useful outside of TE
 - Remote interface IP address, Link Local/Remote Identifiers (Segment Routing)
 - Shared Risk Link Group (LFA)
 - Unidirectional Link Delay, Unidirectional Available Bandwidth (Path Computation)
- How do we advertise these attributes without affecting existing MPLS TE application



Proposed Solution

- Use existing format of the TE link attributes
- Use Extended Link LSA for flooding
- Allocate code points from the OSPF Extended Link TLV Sub-TLV Registry
 - <http://www.iana.org/assignments/ospfv2-parameters/ospfv2-parameters.xhtml#extended-link-tlv-sub-tlvs>
- Code points allocated on a case by case bases together with the use-case

Attributes and Non-TE Applications



- Expect future application requirements to be handled by two broad categories.
 - TE LSAs for MPLS and GMPLS Traffic Engineering including optical.
 - TLV-based LSAs for everything else.
- Attributes in second category will be generic and apply to multiple applications.
 - If separate attributes are required, will have unique code points and names (Not expected to be common).



Draft Status

- Problem was presented at IETF 93 and IETF94
- Problem acknowledged by several vendors
 - Contributed to by authors from several vendors
- Good discussion already taken place on the WG list
 - 01 version reflects some of the discussion
 - Backward Compatibility section has been updated



Draft Status (cont.)

- Proposal is to adopt draft-ppsenak-ospf-te-link-attr-reuse-01 as OSPF WG document
- We expect draft to evolve through the process