Mutually Exclusive Link Group [MELG]

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Recap

- Presented ['01] in IETF 87
 - Discussed Static Mutual Exclusivity and Dynamic Mutual Exclusivity.

['02] Changes

- Clarify the semantics of "Virtual TE-Link" used in the draft.
- Discuss the rationale behind using 2 separate constructs - one for each mutual exclusivity type.

Virtual TE Link - Semantics

- Virtual TE-Link Limitations with existing definition(s).
 - No strict guidelines on how the underlying server LSP needs to get set up.
 - Characteristics of the underlying server path not determined until the Virtual TE-Link gets committed.
 - Some key constraints of the Virtual TE-Link (e.g. shared-risk, delay)
 not known to the client until the corresponding server LSP is set
 up.
- Virtual TE-Link An enhanced view
 - Aware of the key characteristics of the underlying server-path (while still uncommitted)
 - Creation/Maintenance is driven by policy
 - Policy determines which Virtual TE-Link to create (which endpoints) and how the underling server LSP (what path) needs to get set up.
 - A Virtual TE-Link remains a Virtual TE-Link through-out its lifetime
 - It may get committed and uncommitted from time to time but never loses its "Virtual" property.

Construct Requirements - Static vs. Dynamic Mutual Exclusivity

- The advertisement paradigm of the TE construct required to carry static mutual exclusivity information is quite different from that of the TE construct required to carry dynamic mutual exclusivity information.
 - Static mutual exclusivity information can get advertised per TE-Link using a simple sub-TLV construct.
 - No scaling issues with this approach.
 - Advertising dynamic mutual exclusivity information per TElink poses serious scaling concerns and hence requires a different type of construct/paradigm.
 - The TE construct for carrying static mutual exclusivity information is introduced in [DRAFT-MELG]; The construct for carrying the dynamic mutual exclusivity information is discussed in [DRAFT-SRcLG].

Next Steps

- Initiate discussion.
- Get consensus on the solution aspects.