draft-ppsenak-lsr-igp-flex-algo-reverse-affinity

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Overview

- Flex-Algo already supports affinity related constraints
  - Exclude-any, Include-any, Include-all

- Affinities are advertised as a link attributes – unidirectional link properties

- Affinities, like many other link attributes, are currently used only in forward direction of the SPT

- We are proposing to allow usage of the affinities in reverse direction
  - Could be set manually
  - Could be set based on some measurements dynamically
    - Input error rate, etc.
Use Case Example

All links metric is 10

Input error rate measurements
Input error rate > threshold
New FAD Sub-TLVs

- Flexible Algorithm Exclude Reverse Admin Group Sub-TLV
- Flexible Algorithm Include-Any Reverse Admin Group Sub-TLV
- Flexible Algorithm Include-All Reverse Admin Group Sub-TLV

- Defined for ISIS and OSPF
Calculation of Flexible Algorithm Paths

• Three new rules are added to the existing calculation rules
• Same as what is being done for forward affinities
• Affinities from a reverse direction of the link are used instead

• Forward and reverse affinities include/exclude constraints are independent and can be used simultaneously
Next Steps …

• Comments are welcome