



I E T F

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draft-ppsenak-lsr-igp-reverse-spf-algo

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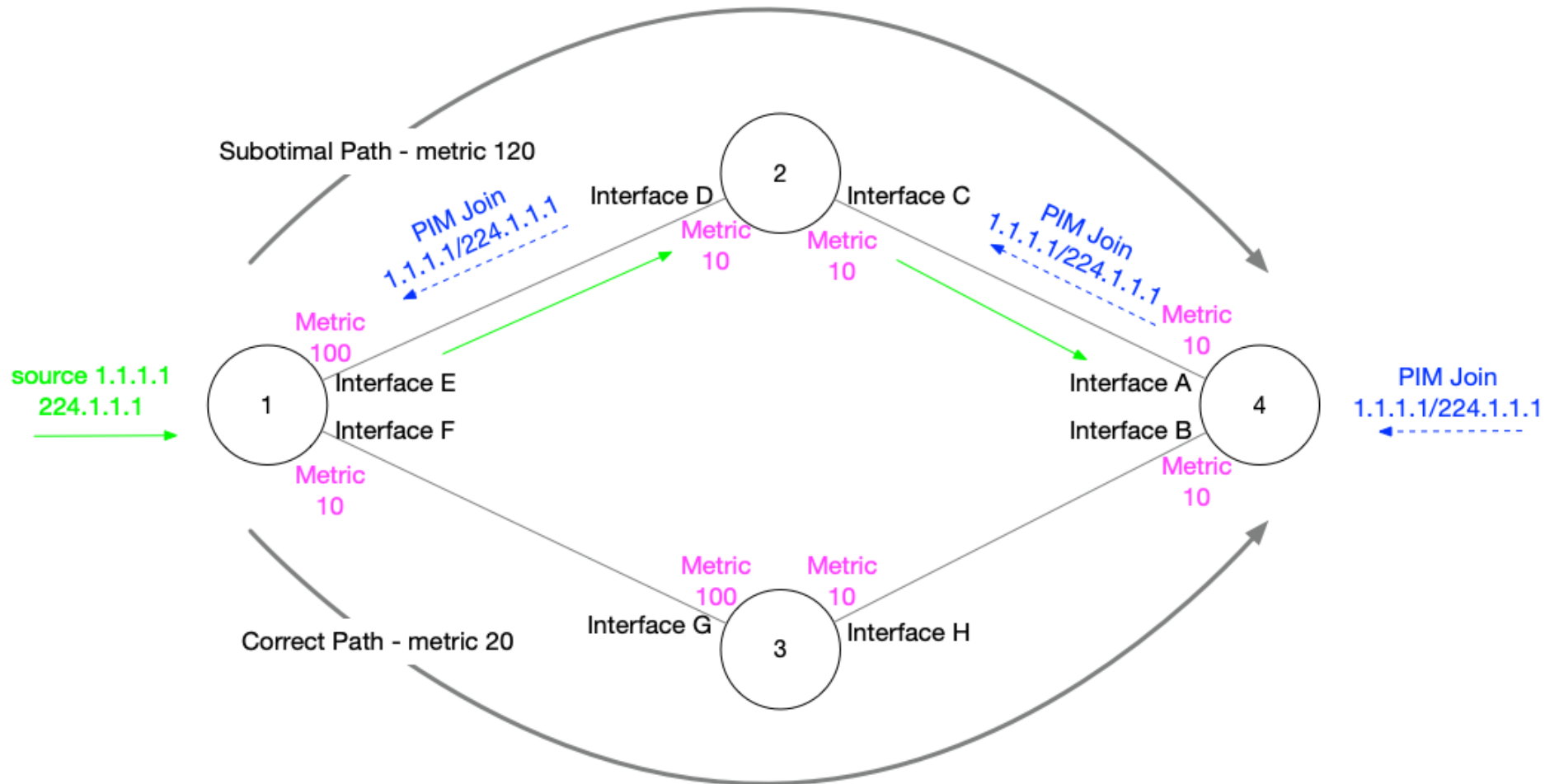
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Use Case

- Flex-algo supports several metric types
- Some of these metrics are dynamic and measured – e.g., min-delay
- Latency could often exhibit asymmetry
- Multicast tree is established from the receivers (R) towards the multicast source (S).
- In the presence of the asymmetric link latency, the usage of the reverse link latency is required for multicast tree calculation.

Use Case Example



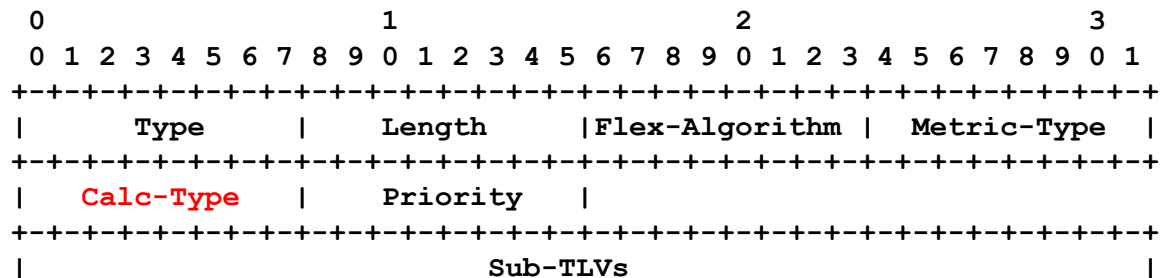
What is Defined

IGP Algorithm Types Registry:

Value Description

Value	Description
2	Shortest Path First (SPF) algorithm based on reverse link metric. It's equivalent to standard (SPF) algorithm (IGP Algorithm Type 0) but uses the metric from the reverse direction of the link.

The IS-IS FAD sub-TLV has the following format:



Usage of rSPF Algorithm

- FAD defines Calc-Type, which is a value from the “IGP Algorithm Types” registry
- If rSPF is advertised in Calc-Type of the winning FAD for flex-algo X, paths for flex-algo X are computed using the rSPF algorithm
- rSPF paths can be installed in the mRIB and be used for RPF and for PIM signaling.
- Assumption is that both mcast source as well as destinations participate in a common data-plane supported by flex-algo

Next Steps ...

- Comments are welcomed