

IGP Flexible Algorithm

draft-ietf-lsr-flex-algo

IETF 105, Montreal, CA

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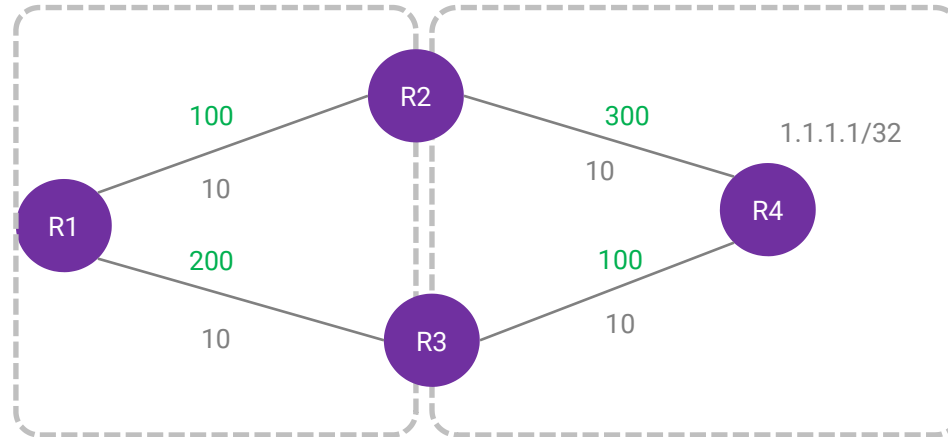
S. Hegde (Juniper)

A. Gulko (Thomson Reuters)

SRv6 Dataplane

- Draft has been extended to cover SRv6 dataplane
 - “SRv6 Forwarding for Flex-Algorithm” section added
 - SRv6 locator is associated with the algorithm
 - SRv6 added across the document where necessary

Flex-Algo Inter-area, Inter-domain

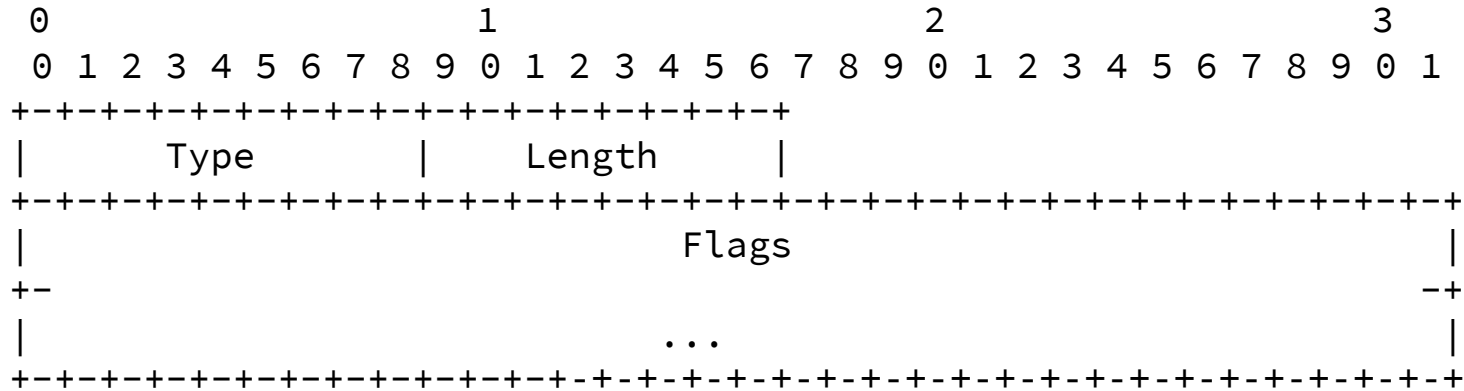


- Flex-Algo path only optimized inside the area
- May not be the best path end-2-end

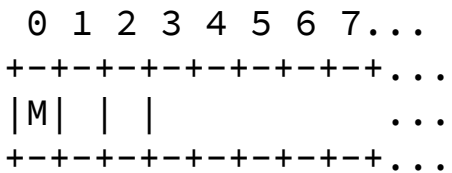
Flex-Algo Inter-area, Inter-domain

- Per prefix –Flex-Algo metric is introduced
 - Used when leaking prefixes between areas
 - Used when redistributing prefixes between domains
- All routers need to agree whether to use the Flex-Algo prefix metric
 - Need to be part of the FAD

ISIS Flexible Algorithm Definition Flags Sub-TLV



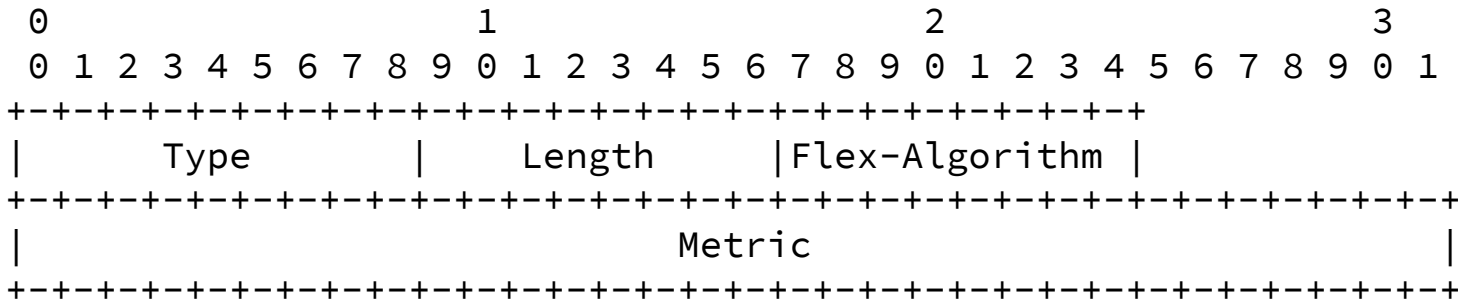
Flags:



Flexible Algorithm Definition Flags Sub-TLV

- M-flag
 - when set, Flex-Algorithm specific prefix metric **MUST** be used, if advertised with the prefix.
 - This flag is not applicable to prefixes advertised as SRv6 locators.
- Similarly defined for OSPF
- Flex-Algorithm Definition Flags Registry defined
 - Under “Interior Gateway Protocol (IGP) Parameters”

ISIS Flex-Algorithm Prefix Metric Sub-TLV



- **ISIS FAPM Sub-TLV**
 - Optional sub-TLV of:
 - TLVs 135, 235, 236, and 237
- Similarly defined for OSPF

Next Steps

- Multiple implementations available
- Continue to evolve the document
- Questions/Comments?

Thank you!