

Export of IGP Flexible Algorithm Information in IPFIX

draft-liu-opsawg-ipfix-igp-algo

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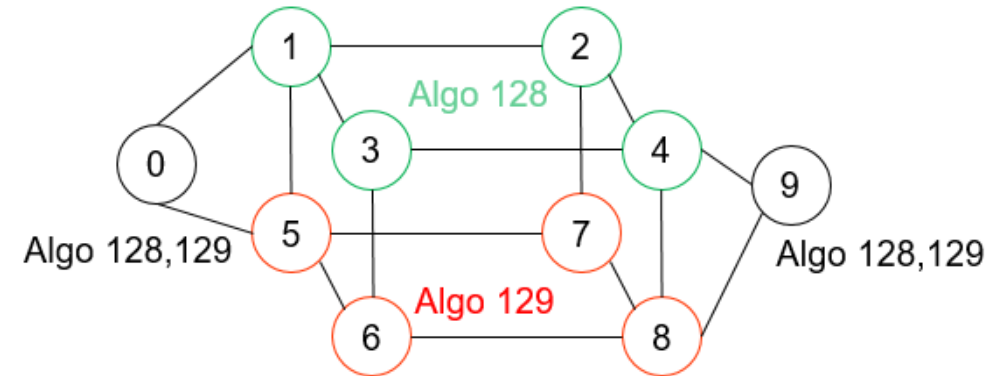
OPSAWG

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Background and Motivation

- An IGP Flexible Algorithm (IGP FA) allows IGPs to compute constraint-based paths. IGP FA can be used with:
 - SR-MPLS: FA associated SR-MPLS Prefix-SID [RFC9350] or adjacency SID [I-D.ietf-lsr-algorithm-related-adjacency-sid]
 - SRv6: The SRv6 locator holds the binding to the algorithm. [RFC9350]
 - IPv4/IPv6 prefixes: IP Flexible Algorithm [RFC9502]
- When monitoring a traffic flow in a network with IGP Flex-Algorithm enabled:
 - Which Flex-Algorithm is the SR-MPLS SID, SRv6 SID locator or the IPv4/IPv6 prefix locator belongs to ?



IPFIX for Flexible Algorithm

➤ A new IE

Name: flexAlgo

ElementID: TBD1

Description: The 8-bit value that represents an IGP Flexible Algorithm number related with an SR-MPLS SID, an SRv6 locator or an IPv4/IPv6 prefix. The Flexible Algorithm number are specified in the IANA "IGP Algorithm Types".

Abstract Data Type: unsigned8

Data Type Semantics: identifier

➤ Operational Considerations

- When monitoring SR-MPLS flows, the IE "flexAlgo" indicates the IGP flexible algorithm of the active SR-MPLS SID.
- When monitoring SRv6 flows, the IE "flexAlgo" indicates the IGP algorithm related with locator of the active SRv6 SID.
- When monitoring pure IPv4/IPv6 flows, the IE "flexAlgo" indicates the IGP algorithm related with the destination IPv4/IPv6 address or the IPv4/IPv6 next hop address.

Next Steps

- Welcome feedback and comments!

Thank You !