The Application Specific Link Attributes (ASLA) any Application bit
draft-hegde-lsr-any-app

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Shraddha Hegde
Ron Bonica
Chris Bowers
Robert Raszuk
Lizhenbin
Agenda

- Problem statement
- Protocol extensions
- Backward compatibility
Problem statement

- Network operator may want certain link attributes to be used by all current and future applications
  - Many examples of networks evolution followed this approach
- ASLA allows for attribute advertisement where link attributes applicable to one application or some applications.
- There is limited provision to advertise attribute that is applicable to any application currently defined or going to be defined in future
Problem statement

- RFC 8919/RFC8920 do not allow application to use attributes from zero length SABM when any other attribute is advertised with an application bit set.

- More granular control over attribute advertisement for any application vs specific application is useful.
Protocol extension

SABM bit mask values for OSPF and ISIS

- Bit 0: R bit: RSVP
- Bit 1: S Bit: SR-TE
- Bit 2: F bit: LFA
- Bit 3: X bit: Flex-algo
- Bit 4: A-Bit Any Application
Backward compatibility

- A node that does not understand A bit, ignores the A bit and processes other ASLA or other bits in same ASLA as per RFC 8919/8920
- The mandates that if same attribute is advertised under ASLA with A bit and ASLA with specific application bit set, the advertisement under ASLA with specific application bit set precedence.
- Until all nodes are upgraded to support A bit, all nodes in the network need to advertise attributes with A bit set as well as application specific bit set.
- SABM with zero length processing continues to follow RFC 8919/8920 procedures and this draft does not modify that
Next steps

- Request review and comments
- Request WG adoption
Thank you