Encoding Network Slice Identification for SRv6

draft-cheng-spring-srv6-encoding-network-sliceid-05

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Why are we having this discussion here?

- This Draft describes a method to encode SLID (Slice identifier, May also be referred to as NRP-ID [I-D.iert-teas-ietf-network-slices]) in the source address of IPv6 header.
- Spring suggests that it modifies the usage of IPv6 header fields and should be discussed in 6man, and we also look forward to the comments from 6man.

Ingress PE:
- Encapsulate outer IPv6 header
- Encode SLID in Source Address
- Set SPI (SLID Presence Indicator)

P:
- Check SPI
- Parse SLID from Source Address
- Apply proper forwarding treatment

Egress PE:
- Decapsulate outer IPv6 header

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SLID & SPI

- **SPI (SLID Presence Indicator)** is used to inform transit routers that a SLID is encoded.
- **Two possible places in the outer IPv6 header for SPI:**
  - SPI-bit in Traffic Class
  - SPI-Prefix in Source Address

Governed by local policy and uniform within the SR domain:
- The length of SLID
- The position of SPI bit, or the assignment of SPI prefix