DetNet SRv6 Data Plane Encapsulation

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DetNet Overview

• Key Features
  • DetNet provides a capability to carry specified unicast or multicast data flows for real-time applications with extremely low data loss rates and bounded latency within a network domain.

• Key Technologies
  • Resource Allocation / Service Protection / Explicit Route
DetNet SRv6 Data Plane Requirement

- A method of identifying the SRv6 payload type;

- A suitable explicit route to deliver the DetNet flow; (e.g., Segment List in SRH)

- A method of indicating packet processing, such as PREOF(Packet Replication/Elimination/Ordering Function); (detailed in next slides)

- A method of identifying the DetNet flow; (detailed in next slides)

- A method of carrying DetNet sequence number; (detailed in next slides)

- A method of carrying queuing and forwarding indication to do congestion protection; (not covered in the current version)
DetNet SRv6 Data Plane Solution

Flow Identification(20bits) and Sequence Number(28bits) are carried in:

- **Option1:** SRH TLVs
- **Option2:** arguments in the SID for Relay Node
- **Option3:** DetNet SID in segment list