IPv6 Segment Endpoint Option

Draft-bonica-6man-seg-end-opt

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Motivation

• Need to convey instructions to selected segment endpoints
  • Possibly for Service Function Chaining

• For example
  • A path contains 5 endpoints
  • Instruction A needs to be delivered to endpoint 3
  • Instruction B needs to be delivered to endpoint 4
Solution

• Put a Destination Options Header in front of the Routing header
  • Processed by each segment endpoint
• Put a Segment Endpoint Option in the Destination Options header
  • Segment Endpoint Option contains a Segments Left field
    • Decremented at each segment endpoint
  • Segment Endpoint Option contains a list of containers
    • Each container contains a Segment ID and IP options
    • IP Options are processed when Segment ID is equal to Segments Left
Next Steps

• Call for adoption in 6man WG