Conex IPv6 Destination Option

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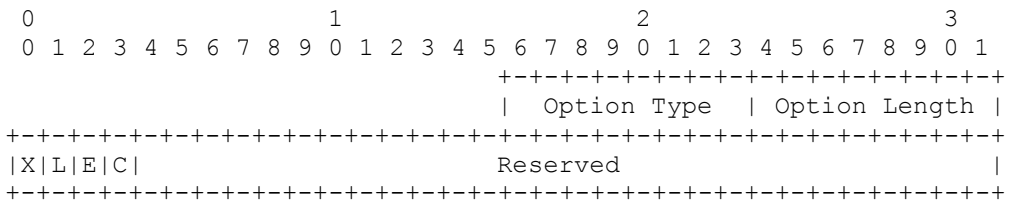
The mechanism

- The conex wg decided that using destination options was the best way forward
- The conex-unaware nodes will not inspect the destination options header.
- The conex-aware nodes on path that inspect these options are not exactly standards compliant
  - RFC2460 does not use RFC2119 wording and hence it is hard to say one way or another

Option format



Option Type
   8-bit identifier of the type of option. The option identifier
   for the conex destination option will be allocated by the IANA.

Option Length

   8-bit unsigned integer. The length of the option (excluding
   the Option Type and Option Length fields). This field MUST be
   set to the value 4.

X Bit
   When this bit is set, the transport sender is using ConEx with
   this packet. If it is reset, the sender is not using ConEx.

L Bit

   When this bit is set, the transport sender has experienced a loss.
   If it is reset, the sender has not experienced a loss.

E Bit

   When this bit is set, the transport sender has experienced
   ECN-signaled congestion. If it is reset, the sender has not
   experienced ECN-signaled congestion.

C Bit

   When this bit is set, the transport sender is building up
   congestion credit. Otherwise it is not.

Open issue

- We have a lot of free bits (28 to be exact) left ☺
- What do we do with those?
  - Leave them empty?
  - Use them for some other conex related purpose?
    - If so, what?
    - One suggestion was to not have the destination option in each packet but carry aggregate metrics every few packets

Next steps

- The authors request wg adoption of the draft
- The 6man wg needs to review the option prior to progressing the draft to the IESG

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