IPv6 Extended Fragment Header

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https://datatracker.ietf.org/doc/draft-templin-6man-ipid-ext2

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Summary of the Draft

- IPv6 Destination Options Header with single Destination Option
- Similar to IPv6 Fragment Header (FH), but with 64-bit Identification
- When used, replaces FH in per-fragment extension headers
- Avoids RFC4963 Identification reuse issues when RFC7739 applied
- Similar motivation as IPsec AH/ESP Extended Sequence Number
- Secured retransmission service for lost fragments

```
+------------------------------------------+
|  Next Header |  Hdr Ext Len |  Option Type |  Opt Data Len |
+------------------------------------------+
|  NH-Cache |  Index |  Res|  Fragment Offset |  Res|M|
+------------------------------------------+
|                               Identification (64 bits) |
+------------------------------------------+
```
Next Steps

- **IANA Allocations**
  - Early allocation: “Destination Options and Hop-by-Hop Options” Option Type
  - FCFS allocation: “Experimental Option Experiment Identifiers” for TCP and UDP


- IPv6 WG Item?