IPv6 DOTS Signal Option

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History

- Initial proposal: add an opportunistic communication channel using IPv6 Hop-by-Hop Option
  - store and re-embed information in other forwarded IPv6 packets at routers
  - select best candidates packets
- History
  - First presentation at IETF 96 Berlin
  - Presented in 6MAN and OPSEC at IETF 98 Chicago
- Concerns about the use of Hop-By-Hop Options header
  - not recommended / may be discarded by most of routers
  - overhead

Proposal evolution

- Keep the original idea of having an auxiliary channel
- But not tightened to a single protocol
- Asynchronous process with DSR (DOTS Signal Repository)
  - Client sends/stores signaling information (with a limited TTL)
  - Server retrieves it when primary channel is not available
  - Allows also clients to pro-actively signal (suspected but not confirmed attacks)
- Signalling data has to be transmitted through two independents protocols (DSR - DOTS server and DSR - DOTS client)