draft-bellis-dnsop-session-signal-00

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History

- EDNS is *per message*, and *stateless*

  - except when it isn't (e.g. UDP buffer size in responses)

- RFC 7828 (edns-tcp-keepalive) fudges around the issue

- Authors consider defining a new mechanism for stateful signalling to avoid the problems with EDNS

- During IETF 95, the overlap with dnssd-push is identified – we suggest separating out state and connection management from that draft

What is a "Session" ?

- Long-lived
- Bidirectional
  - i.e. either end can initiate messages
- Ordered

This includes TCP, and DNS-o-TLS, but appears to exclude UDP, DNS-o-TLS

Proposed Design

- A new OpCode - "SESSION" - for carrying persistent options
- Options are carried in TLVs that appear immediately *after* the 12 octet header
  - No "sections" - QDCount, etc == 0
  - => no "dummy question"
  - Should appear as trailing garbage to existing parsers
- Each option TLV is *explicitly* acknowledged
  - No guessing whether the far end understood
- Either party can initiate sending an option

Any Questions?