draft-ietf-dnssd-push-07

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Changes since -02

- -03

  - Updated wouters-edns-tcp-keepalive reference

- -04

  - Details of connection sharing, and determination of "same server"

- -05

  - More on determination of "same server"

Changes in -06

- Supporting DNS Update on the same server is optional

- Standard DNS Queries are allowed on the connection, for names within the zone

- Supporting classes other than "IN" is optional

- Discussion on which side closes the connection, and under what circumstances

- Use of EDNS(0) TCP Keepalive timeout value to specify delay before retrying after an error

- More details of Termination Messages

Changes in -07

- Clarification of qtype ANY

- Responses MUST echo back operation ID

- Further clarification about connection closing:

- Client should not keep idle connections open indefinitely

- Client should not assume that a single error kills a connection

Discussion Points

- EDNS(0) TCP Keepalive option is implicit for SUBSCRIBE

- Need EDNS(0) TCP Keepalive option in all responses, or only if idle timeout changes?

- What are "the required keepalives"?

- Close connection with TCP RST vs. FIN

- Should UNSUBSCRIBE and RECONFIRM generate responses?

EDNS(0) TCP Keepalive option is implicit for SUBSCRIBE

- Saves some bytes on the wire

- But makes SUBSCRIBE a special case

EDNS(0) TCP Keepalive option in all responses, or only if idle timeout changes?

- Saves some bytes on the wire

- But TCP Keepalive spec suggests
  it needs to be repeated in every response

The DNS Keepalive spec doesn't specify any way to keep a connection alive

- TCP-layer keepalives?

  - Lower overhead

  - What OS APIs exist for this?

- DNS-layer keepalives?

  - A DNS QUERY containing zero questions?

  - A DNS SUBSCRIBE containing zero questions?

  - An "empty" DNS message over the TCP connection?

  - Provides application-layer liveness check

Close connection with TCP RST vs. TCP FIN

- Does it matter?

Should UNSUBSCRIBE and RECONFIRM generate responses?

- Right now they do not

- Sending pointless responses may just be a waste of bytes

- Development and debugging can be achieved by looking at log files