



QDCOUNT is (usually) One

draft-bellis-dnsop-qdcount-is-one-00

STD13 “ambiguity”

- Predates RFC 2119 / RFC 8174 requirements keywords
- QDCOUNT is a 16-bit field
- Text (mostly) uses the singular, e.g.
 - “the question for the name server”
 - “the domain name in question section”

So I asked the author...

Paraphrase of a conversation with Paul Mockapetris

“It was not intended to constrain the query to only one question, such that multiple questions could be asked if suitable semantics were defined”

We think that can't be done

- Other DNS response fields do create such a constraint, specifically:
 - RCODE
 - what answer should be given if Q1 is NOERROR but Q2 results in NXDOMAIN?
 - AA
 - Similarly a response might contain both authoritative and non-authoritative data

So let's settle it...

- This draft updates RFC 1035 to limit the range of QDCOUNT to 0...1
- If there's demand for it, the long-expired draft-bellis-dnsexp-multi-qtypes-07 attempts to constrain the solution space and uses EDNS

Questions?