

Removing EDNS Workarounds

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Background

- EDNS standard (RFC 2671, 1999; updated by RFC 6891)
- DNS software vendors added various workarounds for broken servers
- Broken servers:
 - Doesn't respond at all
 - Respond with non-FORMERR error code
- DNS Servers cope with that by asking without EDNS

The Plan

- TL;DR: Retry with EDNS again unless FORMERR is received
- Coordinated effort by CZ.NIC, ISC, NLnet Labs and PowerDNS (in alphabetical order)
 - We invite more vendors to join!
- Remove all workarounds for EDNS related breakages from new software versions after certain date

The Date

1. February 2019

The Testsuite

- The website: <https://ednscomp.isc.org/ednscomp/>
- The open-sourced test suite: <https://gitlab.isc.org/isc-projects/DNS-Compliance-Testing>

For implementors

- How to answer queries with EDNS? Two options:
 - Correctly implement EDNS and EDNS(0)
 - RCODE=FORMERR