DNSSEC, EDNS, and TCP

NANOG 46
Lightning Talk

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EDNS Buffer Sizes
From Jun 17, 2009, 09:03:42 To Jun 17, 2009, 13:03:42 UTC

Percent of Queries

Time, UTC

- Green: 4096-4607
- Yellow: 3584-4095
- Orange: 3072-3583
- Pink: 2560-3071
- Purple: 2048-2559
- Blue: 1536-2047
- Light Green: 1024-1535
- Red: 512-1023
- Brown: 0-511
- None: 0
Reply Size Limits seen at L-Root
From 72 hours of DITL data, March/April 2009

Fraction of Queries

Reply Size Limit

No EDNS
DO=0
DO=1
Colleagues,

On behalf of PIR Technical Support I would like to announce that as of today, 2009-06-02, at 16:00 UTC .ORG is DNSSEC signed.
was kind enough to share some packet traces with DNS-OARC from this day.
TCP Query Types at yyz1.afilias-nst.info on 2009-06-02

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fpdns Analysis

7200 Clients

- Unknown: 60%
- BIND 9.2.3rc1 -- 9.4.0a0: 39%
- 9.2.0rc7 -- 9.2.2-P3: 0%
- BIND 8: 0%
- Mikrotik: 0%
- Nominum: 0%
RFC 4035:

A security-aware name server MUST support the EDNS0 ([RFC2671]) message size extension, MUST support a message size of at least 1220 octets, and SHOULD support a message size of 4000 octets.

BIND 9.5.0a1 CHANGES:

1954.  [func] Named now falls back to advertising EDNS with a 512 byte receive buffer if the initial EDNS queries fail. [RT #14852]