

DNSSEC

Roadblock Avoidance

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Ready For WGLC?

⦿ YES

⦿ But there is this one issue

⦿ Resolver address \neq Single host

⦿ Causes: Anycast Resolvers and DNS proxies

Anycast Resolvers

- ⊗ Most of the time harmless as each address has “singular service level” for DNS
 - ⊗ The issues we see may cause false negatives if tests are ignorant of side effects i.e. TTL may jump around for repeated queries
 - ⊗ Big issue if answer for same query differs in content
 - ⊗ Some return AD bit but not all
 - ⊗ Bigger issue if some return RRSIG but others do not
- ⊗ Proposal for treatment → Add text explaining how to detect and the side effects and how to interpret them

DNS Proxies

- ⊗ Bad Hotel Proxy advertises 3 address for resolvers that are Public Open Resolvers, one validating.
 - ⊗ The three Resolvers have different DNSSEC compliance
 - ⊗ Proxy DOES NOT honor address in query but Randomly sends query to one of the 3 listed
 - ⊗ Proxy does not cache results
- ⊗ Result: 1/3 of answers from signed zones for have AD bit set.
→ simplistic application of tests in draft will result misidentify the “resolvers”
- ⊗ Proposed solution → document how to detect bad proxies and throw up our hands when service levels differ.