

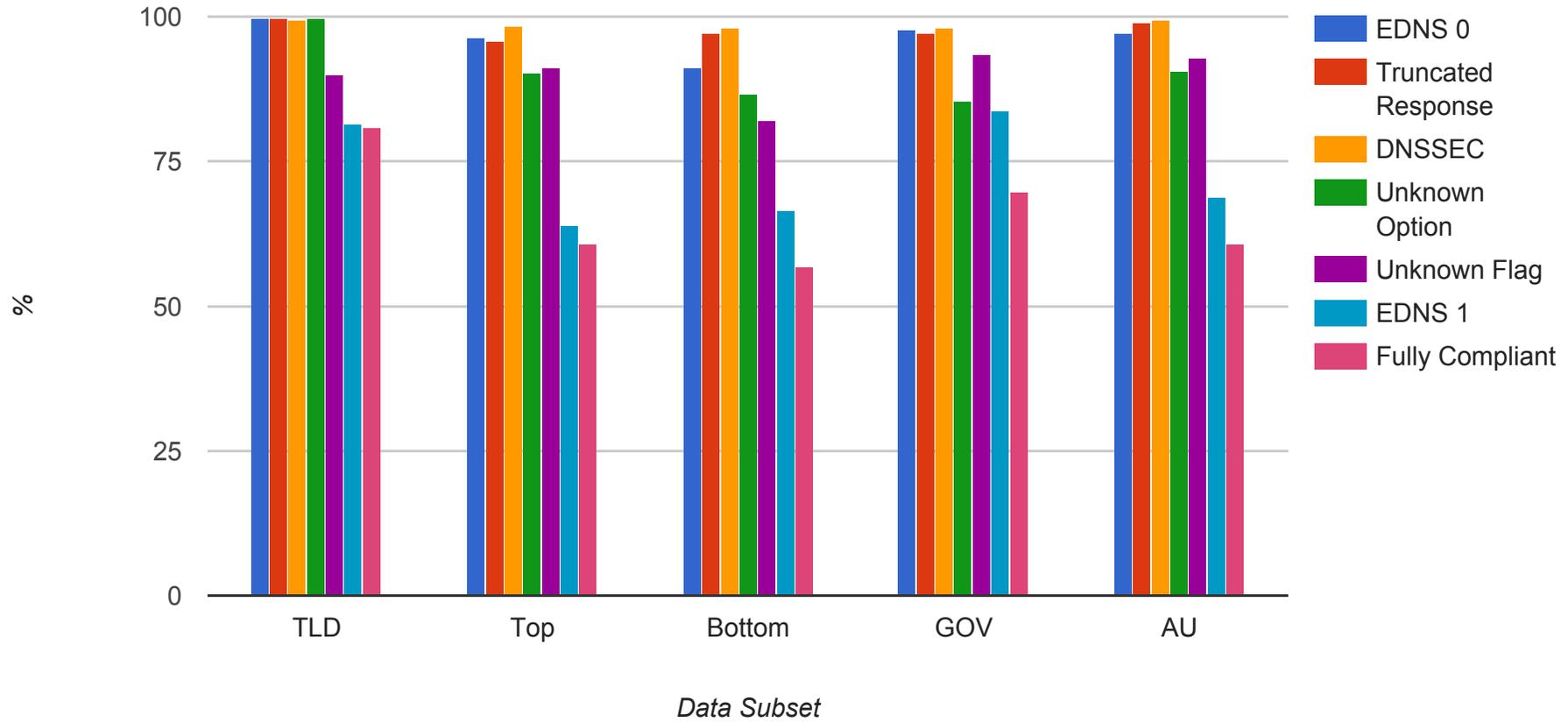
EDNS Compliance A Year On

Mark Andrews
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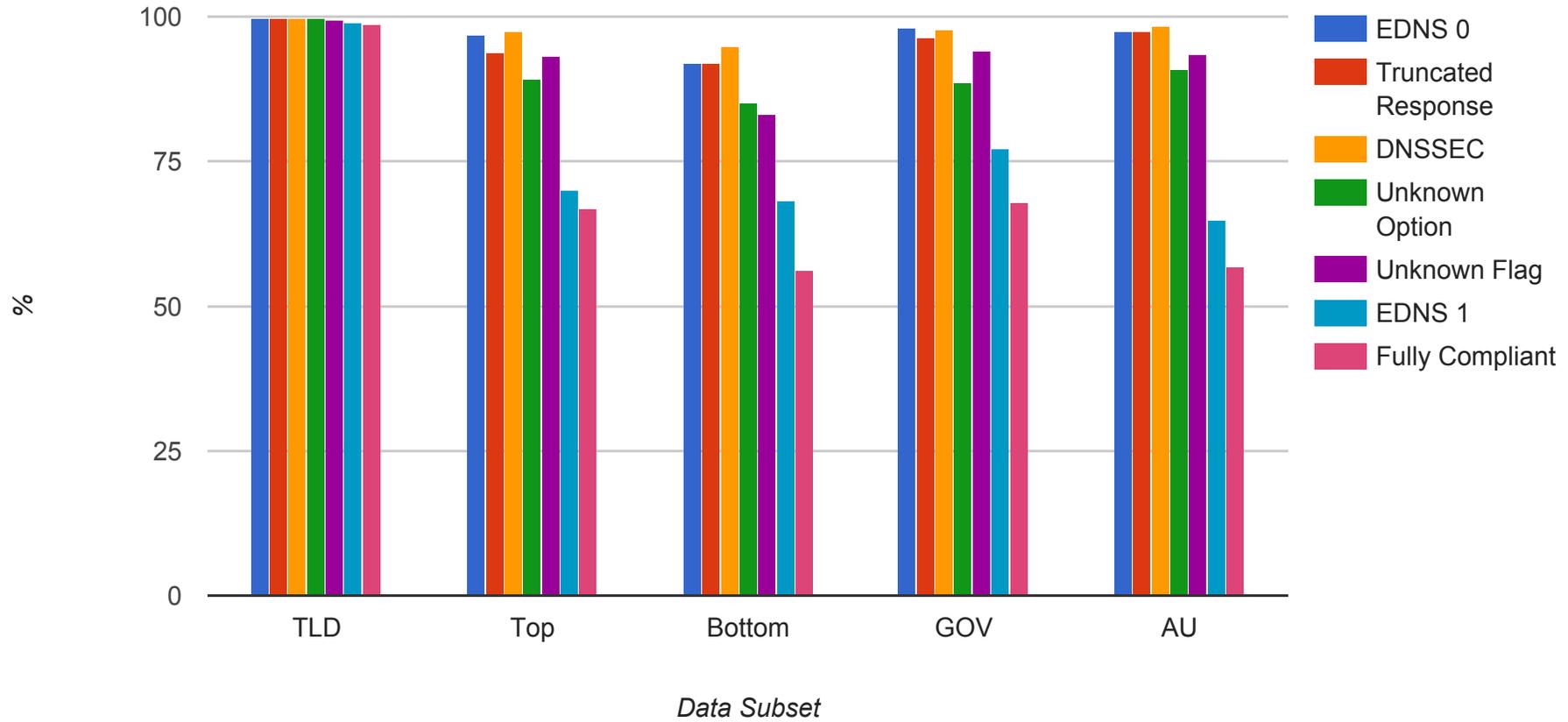
What We Are Testing

- 5 data sets
 - Root zone
 - Alexa Top 1000
 - Alexa Bottom 1000 of top 1 million
 - Alexa .AU entries
 - Alexa .GOV entries
- 9 tests per <zone,server address> (was 8)
- Run the tests daily

EDNS Compliance by Function of EDNS Aware Servers - 1 Apr 2015



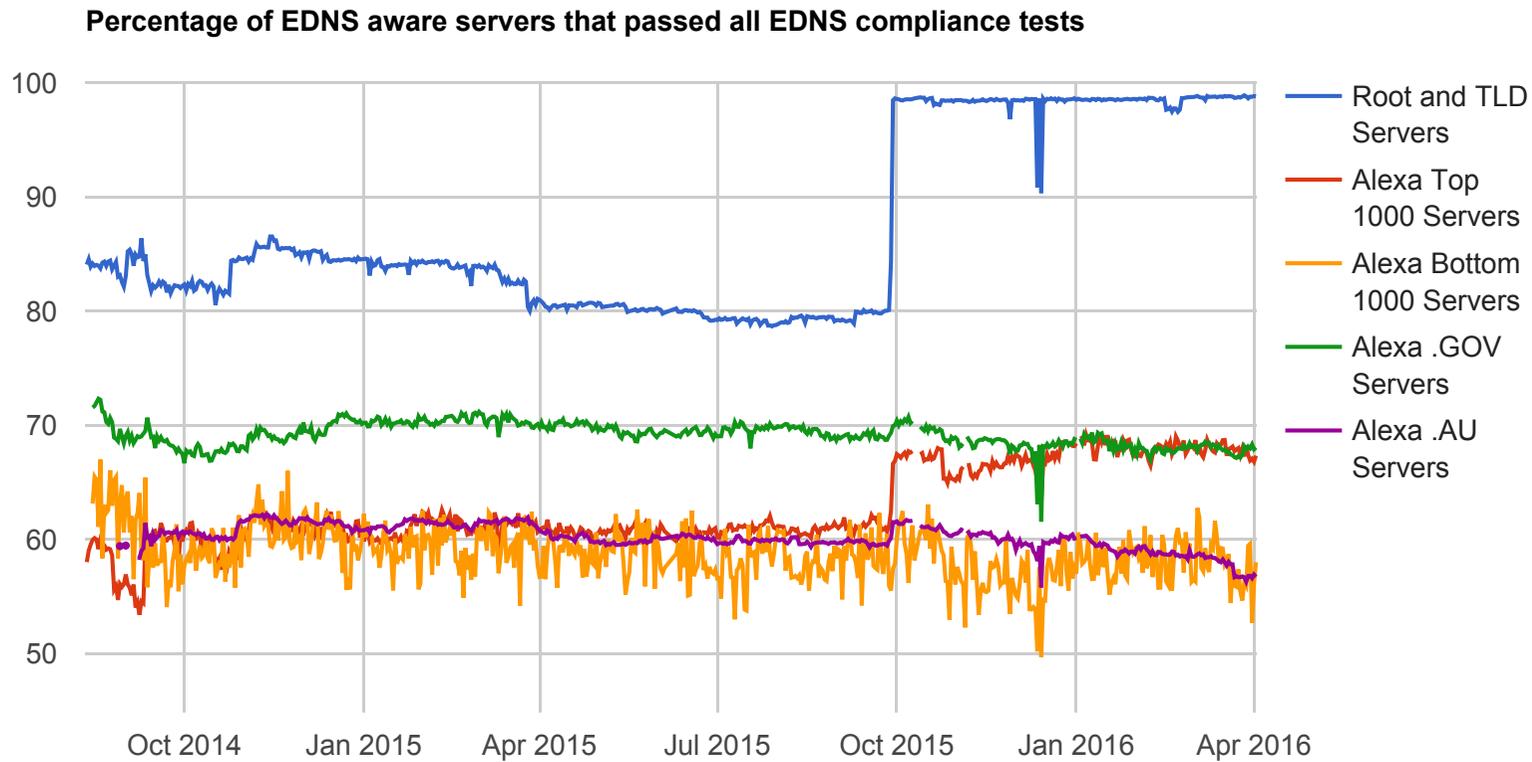
EDNS Compliance by Function of EDNS Aware Servers - 1 Apr 2016



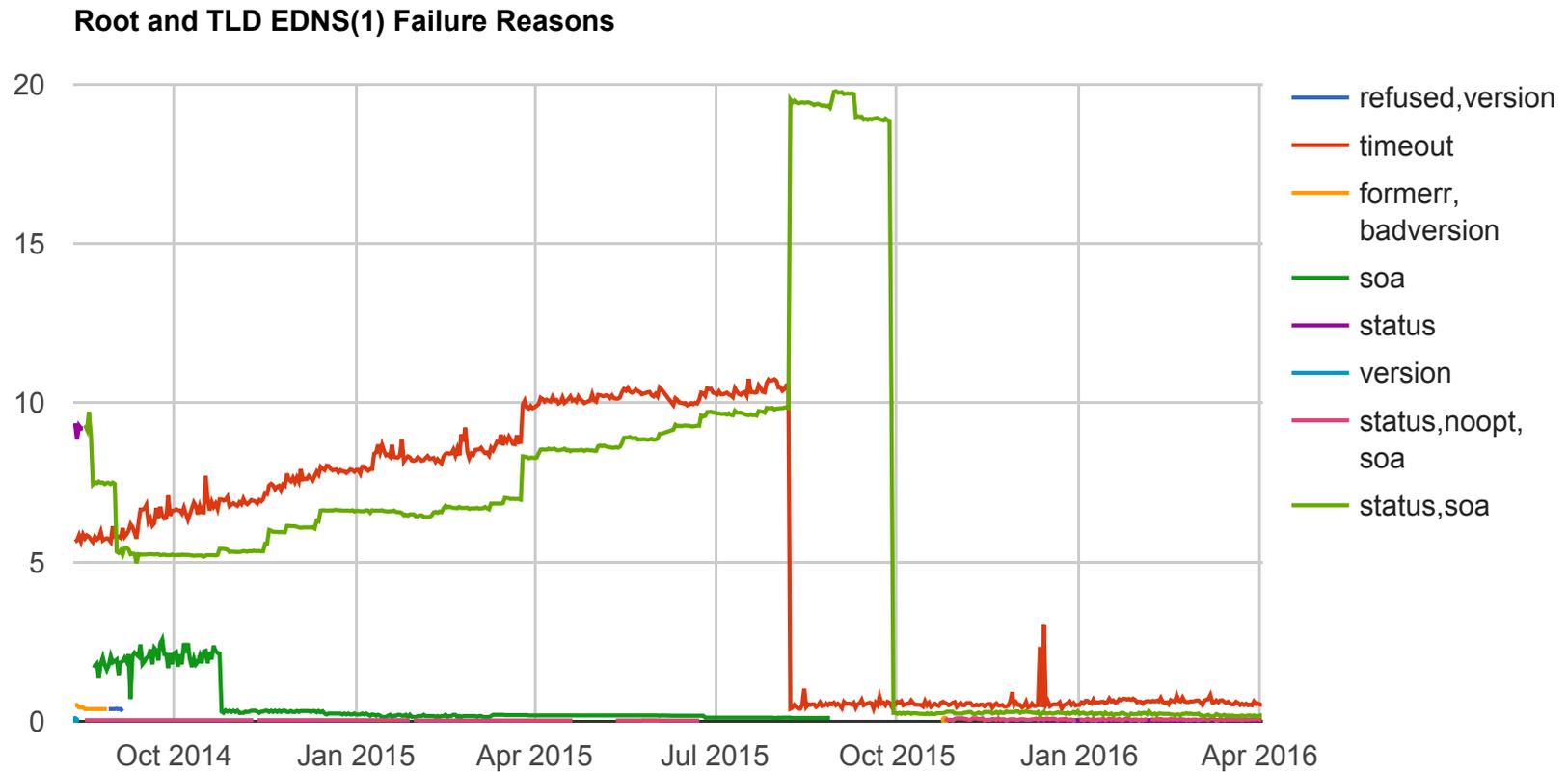
Biggest Changes

TLD Servers

EDNS Compliance Report: 2016-04-02T12:38:29Z



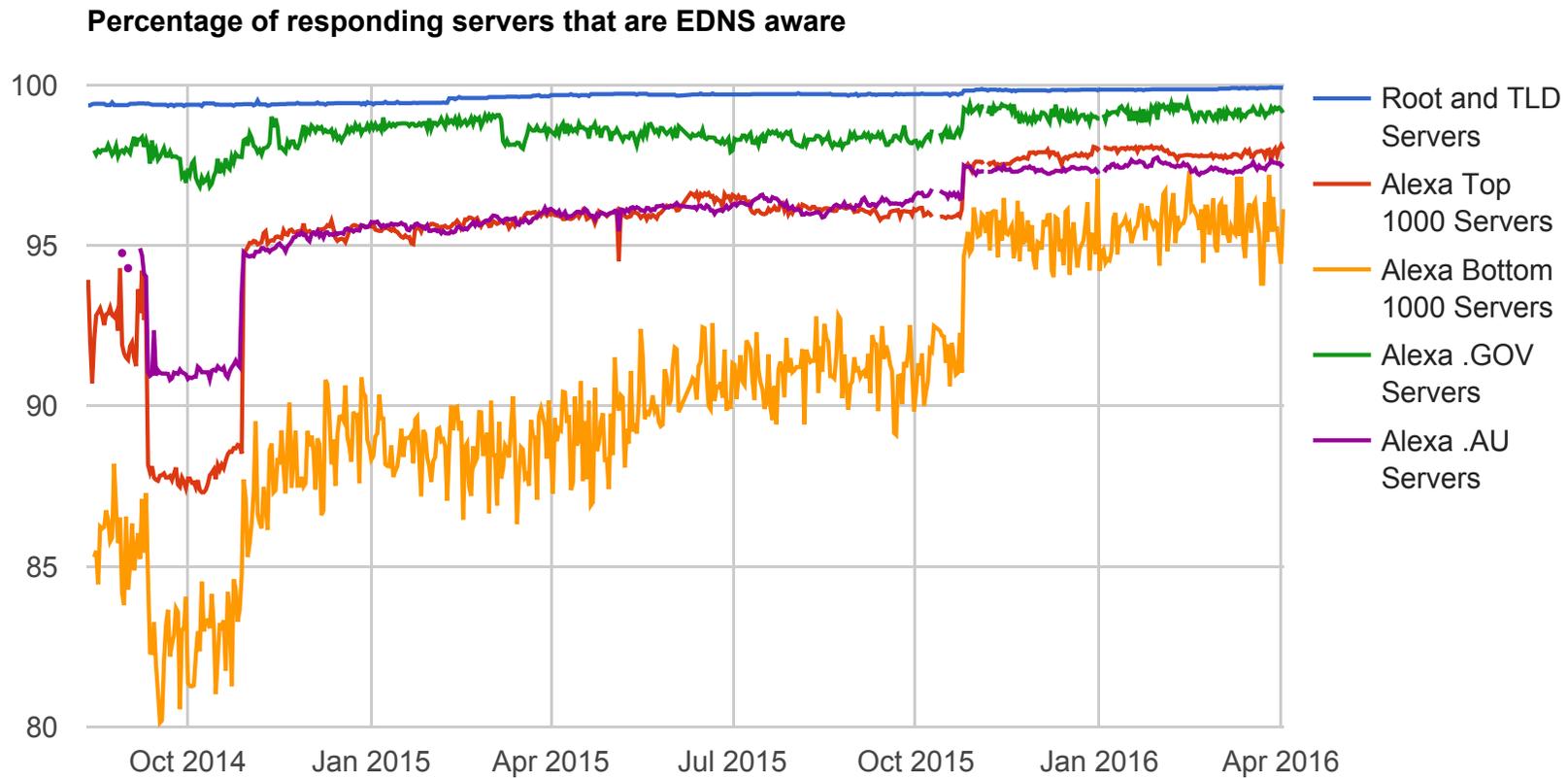
EDNS Compliance Report: 2016-04-02T12:38:29Z



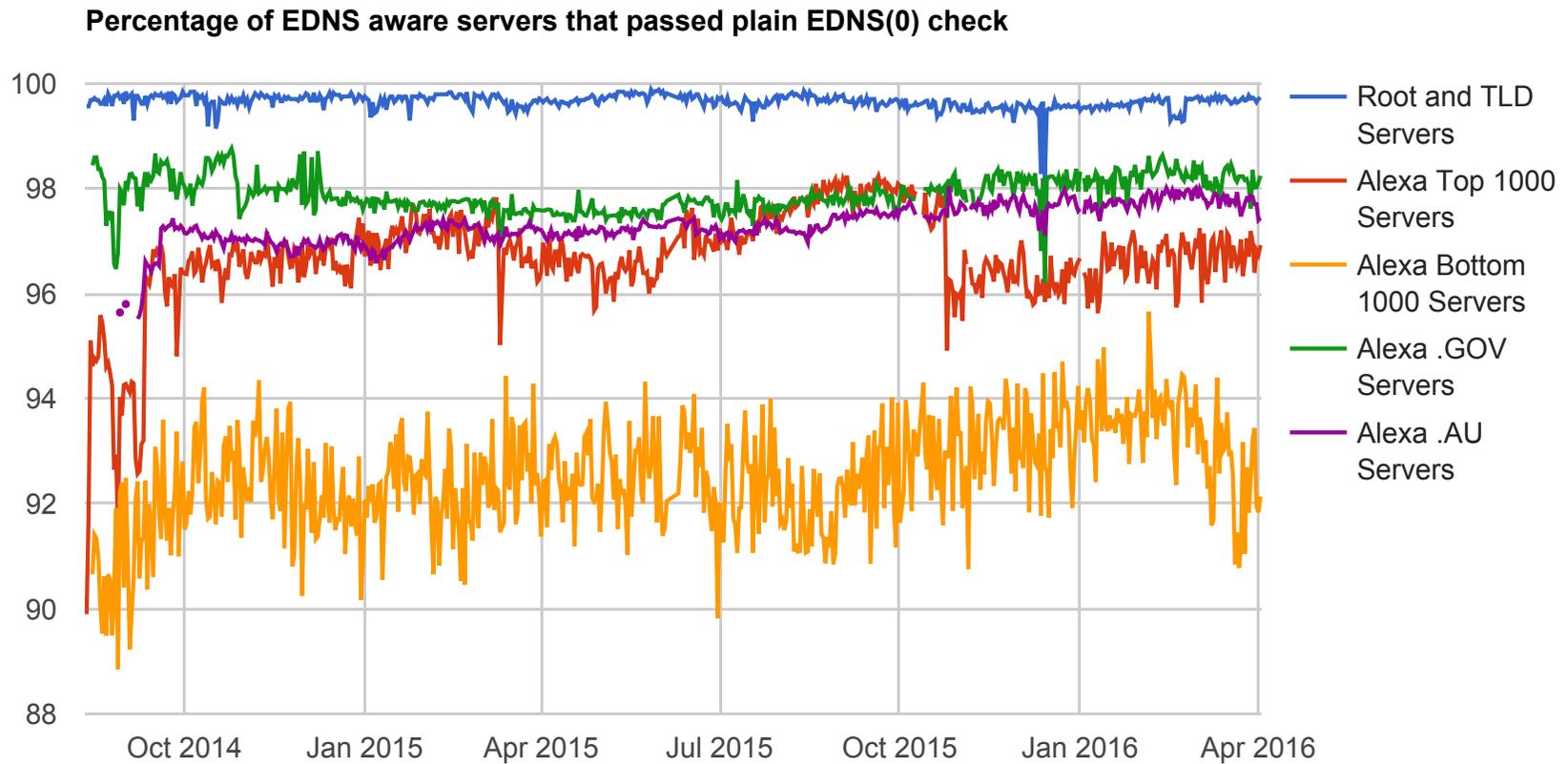
Trends

- EDNS Support still increasing
- BASIC EDNS(0) Compliance slowly improving
- EDNS(1) Compliance slowly getting worse
- Unknown EDNS option behaviour slowly improving

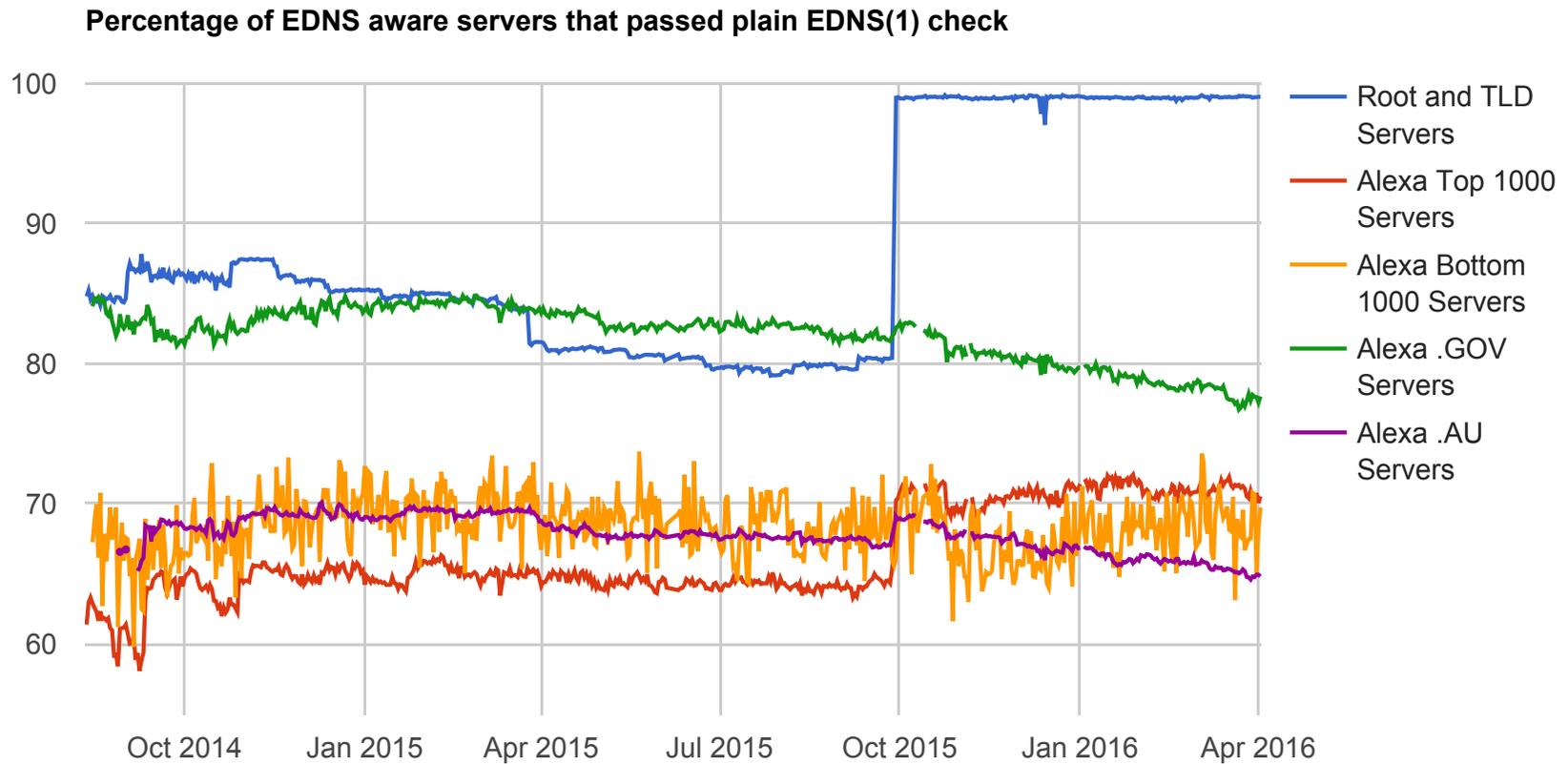
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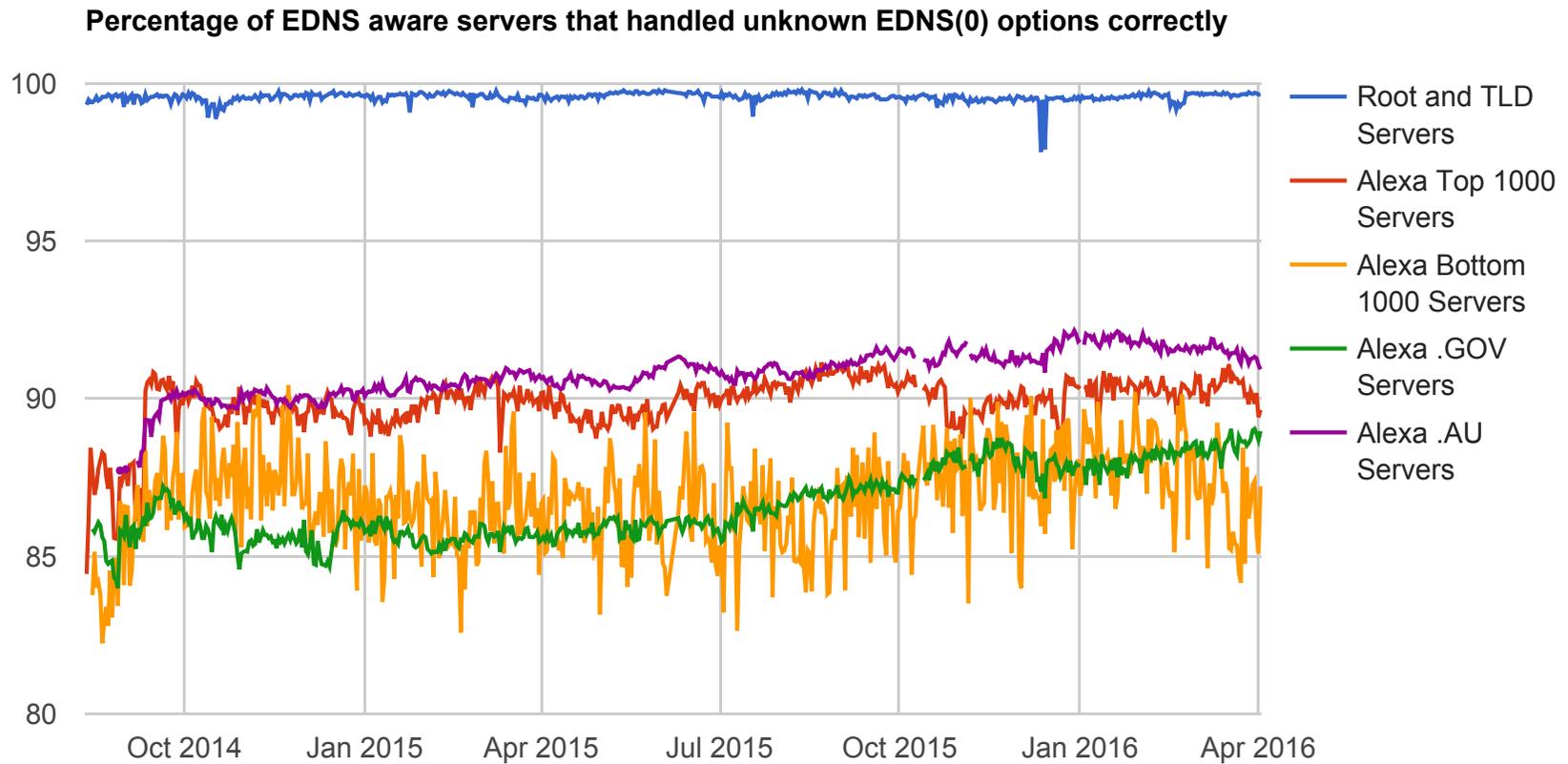
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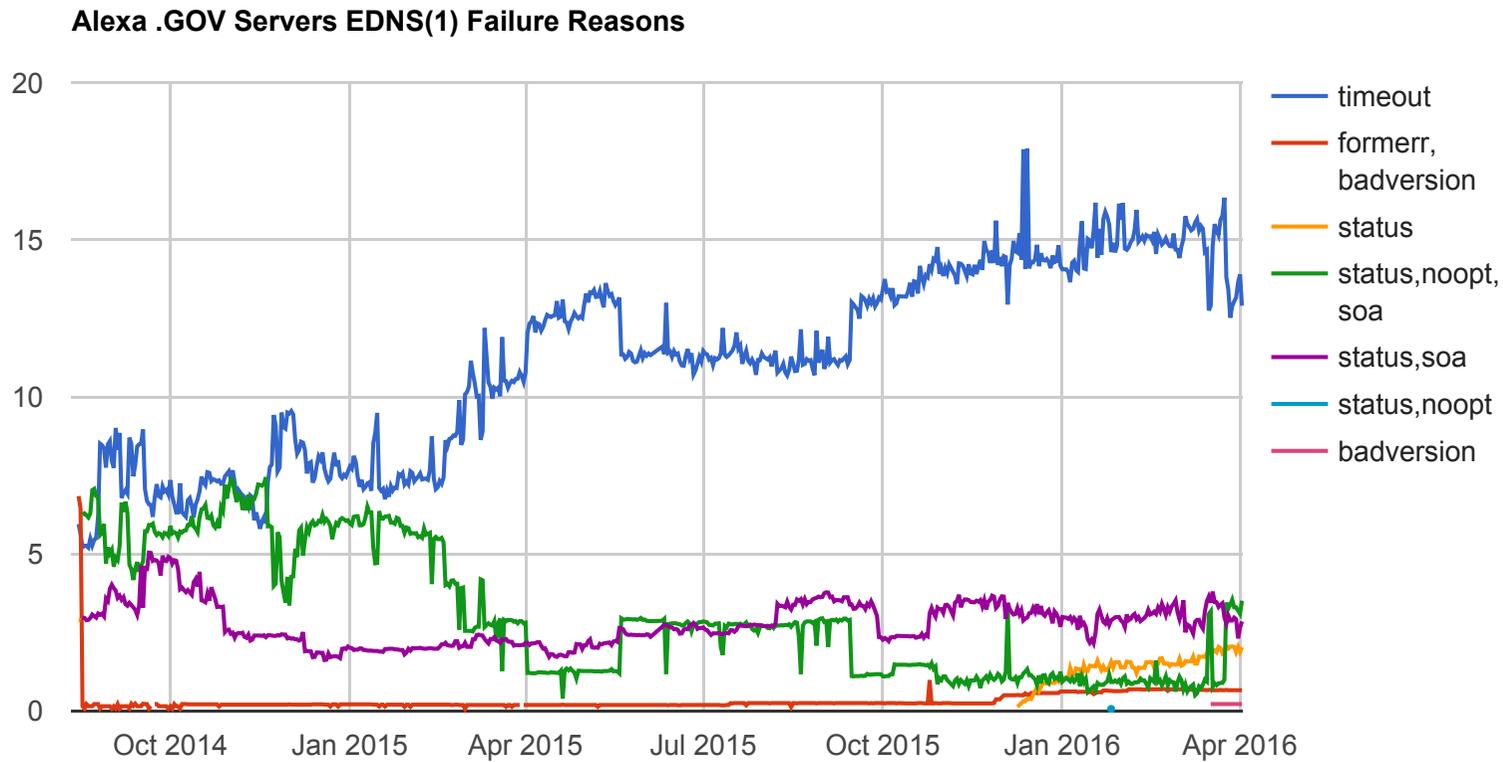
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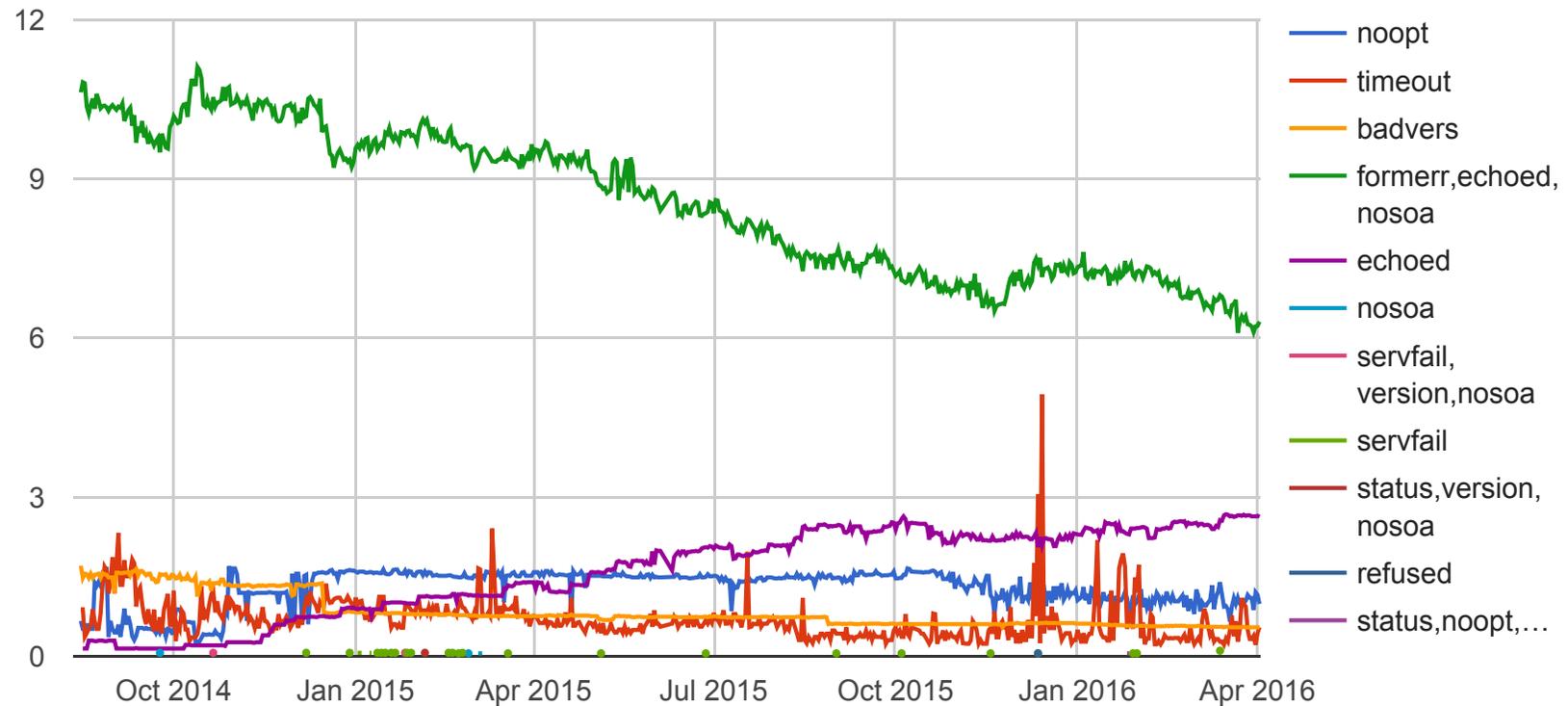


EDNS Compliance Report: 2016-04-02T12:38:29Z



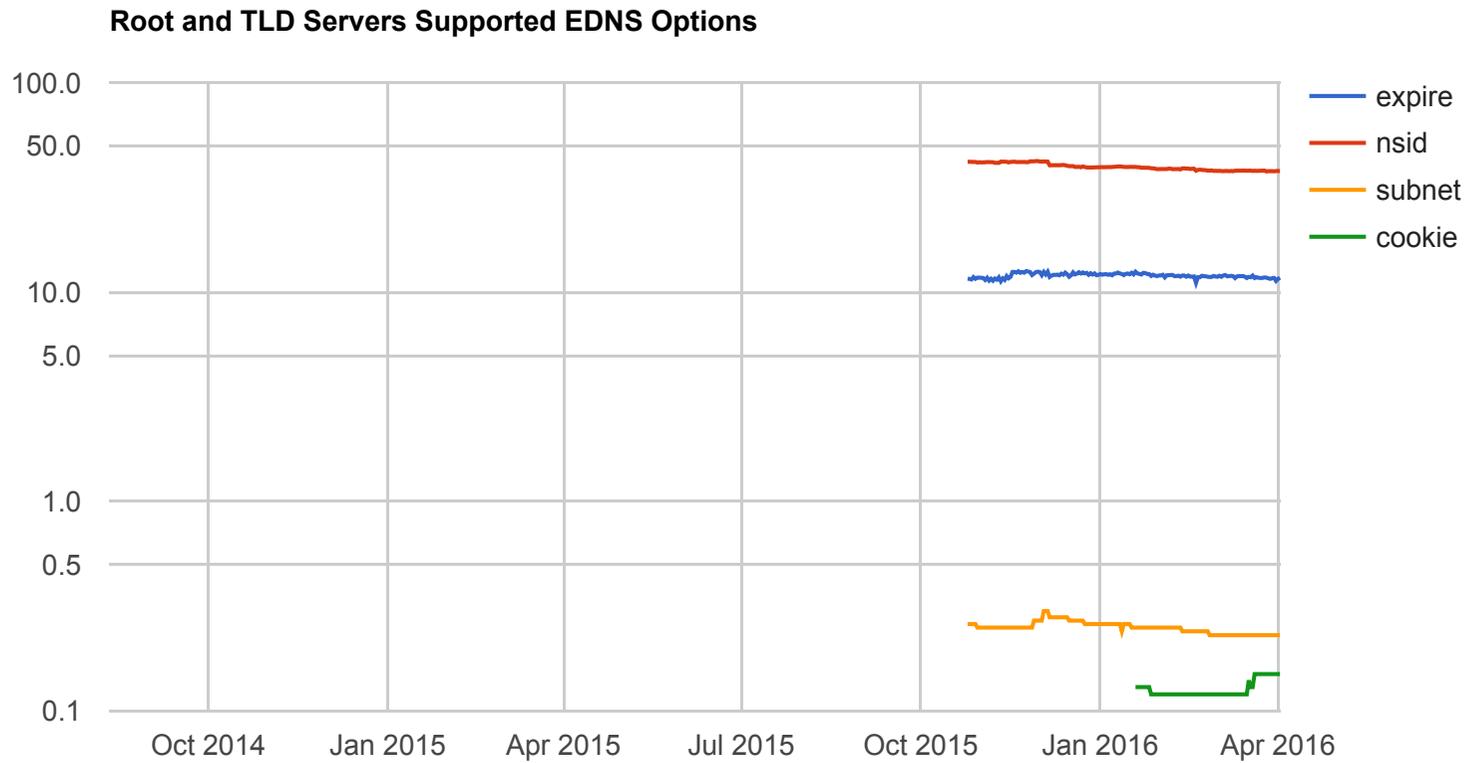
EDNS Compliance Report: 2016-04-02T12:38:29Z

Alexa .GOV Servers EDNS(0) Unknown Option Failure Reasons



cy. @194.42.1.55 (ns2.ucy.ac.cy.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
cy. @194.42.29.1 (cynic.dns.cy.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
dj. @193.251.143.162 (bow.intnet.dj.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
et. @213.55.64.38 (ns2.telecom.net.et.): dns=ok edns=noopt edns1=status,noopt,soa edns@512=noopt ednsopt=noopt edns1opt=status,noopt,soa do=noopt **ednsflags=noopt** optlist=ok,nsid
eu. @93.190.128.138 (cz.dns.eu.): dns=ok edns=ok edns1=ok edns@512=ok ednsopt=ok edns1opt=ok do=ok **ednsflags=mbz** optlist=ok,nsid
gy. @190.80.0.41 (ns1.gtt.co.gy.): dns=ok edns=noopt edns1=status,noopt,soa edns@512=noopt ednsopt=noopt edns1opt=status,noopt,soa do=noopt **ednsflags=noopt** optlist=ok,nsid
gy. @190.80.0.42 (ns2.gtt.co.gy.): dns=ok edns=noopt edns1=status,noopt,soa edns@512=noopt ednsopt=noopt edns1opt=status,soa do=ok **ednsflags=noopt** optlist=ok,nsid
kp. @175.45.176.15 (ns1.kptc.kp.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
kp. @175.45.176.16 (ns2.kptc.kp.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
kw. @161.252.48.140 (dns1.kw.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
kw. @161.252.48.150 (dns2.kw.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
kw. @161.252.48.145 (dns3.kw.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
mil. @199.252.162.234 (con2.nipr.mil.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
nc. @202.87.129.16 (ns1.nc.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
nc. @202.87.129.17 (ns2.nc.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
ps. @213.244.82.147 (dns1.gov.ps.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
sohu. @182.131.23.22 (f.zdnscloud.com.): dns=ok edns=ok **edns1=timeout** **edns@512=timeout** **ednsopt=timeout** edns1opt=ok do=ok **ednsflags=timeout** **optlist=timeout**
tr. @213.248.162.131 (ns3.nic.tr.): dns=ok edns=ok **edns1=timeout** edns@512=ok ednsopt=ok **edns1opt=timeout** do=ok **ednsflags=timeout** optlist=ok
uz. @83.69.138.230 (ns4.uz.): dns=ok edns=ok **edns1=timeout** edns@512=ok **ednsopt=timeout** edns1opt=ok **do=timeout**

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Test Your Own Zones

<https://ednscomp.isc.org/ednscomp>